

DAILY METAL REPORTER

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DOMESTIC METAL MARKET REVIEW

WASHINGTON REPORT

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JANUARY

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Two
LINE
Editorials

The Democrats' insistence that they would like to see Mr. Nixon nominated by the Republicans because he would be the easiest to beat is somehow reminiscent of Bre'r Rabbit's pleas not to be thrown into the briar-patch.

Mr. Adlai Stevenson says that the Democratic party has "some exceptionally well qualified" men who would make good Presidential candidates. And it is only Adlai's innate modesty that prevents his mentioning the most exceptionally well qualified of the lot.

Carnegie Institute scientists report hearing "hissing sounds" transmitted from the planet Jupiter. Obviously the inhabitants of Jupiter have been tuning in on some of our television programs.

Mr. K., of course, is perfectly willing to agree to disarm; but he's not willing to have any nosy inspectors snooping around to see whether he's actually disarming.

As we understand it, Castro is perfectly willing to have a popular election in Cuba just as soon as he can be sure that the proper people will be elected.

Using coal as a road building material, as is now suggested, may be all right, but isn't there danger that such a road might be set on fire by some of these hot rods?

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Washington Report



January 21, 1960

The tumult and the shouting over lead and zinc tariffs has died down for the time being after hectic days of hearings before the Tariff Commission. The next step is the preparation by the commission of its report to Congress, required by March 31, 1960.

This year's tariff tussle bore a great resemblance to the previous encounters between proponents and opponents of higher duties. As has been the case, many domestic producers pleaded for increased protection while smelters who require ore from abroad and Canadian and Mexican mining interests urged elimination of import restrictions. Manufacturers of lead and zinc products generally urged treatment compensatory to that of the raw material. Of those urging greater curbs, most registered opposition to the quotas as a device but they were reluctant to drop it until duties were boosted.

See No Injury on Sheets

During the hearings, the Tariff Commission made public its 3 to 2 vote of no injury to the domestic zinc sheet industry, as a result of its "Escape Clause" investigation.

The commission majority found that imports of zinc sheet were not causing or threatening serious injury to the domestic industry concerned. The commission therefore made no recommendation to the President for the modification or withdrawal of the trade agreement concession applicable to this product.

Chairman Talbot and vice chairman Overton filed a vigorous minority dissent in which they reported imports of zinc sheet were entering this country in such volume as to seriously injure the domestic industry. They concluded that an increase in duty to 56 per cent of the ad valorem would be necessary to correct the situation.

Congressional Opinion

At the onset of the hearings, a parade of Congressional officials told the commission that the current im-

smelting and refining industries and among the producers of lead and zinc in foreign countries shipping to the United States."

The lead and zinc miners, he noted, "have long advocated the simplest and soundest measure of relief, namely a reasonably higher tariff. I am convinced this is the proper cure today."

The Idaho Republican added, however, "it is imperative that the quotas on lead and zinc imports remain in force until some permanent solution to the miners' problem is developed. Indeed, the quotas on lead should be tightened to prevent further deterioration of the domestic lead market."

Senator Bennett (Rep., Utah) asserted that imports of lead and zinc were entering in such quantities "as to injure or threaten serious injury to the domestic industry."

Industry Viewpoints

Highlights of testimony by industry representatives include:

R. A. Young, vice president, the American Zinc, Lead and Smelting Co., told the commission that the best interests of the zinc mining and smelting industry would be served by the imposition "of a reasonable increase in the specific duty rate."

Robert P. Koenig, president, Cerro de Pasco Corporation assailed the import quota as "exactly the kind of destructive response which the U.S. should not take in its attack upon its balance of payments deficit problem."

Simon D. Strauss, vice president, American Smelting and Refining Company, said "continuation of the quota system is a very serious threat to the long-term future of the lead and zinc industry."

John Lennon, vice president of the Amco Division of American Metal Climax, said the imposition of additional restrictions on the importation of lead and zinc would not put domestic production of these minerals on a "sound and stable basis" but would tend to place their future production in jeopardy.

Frederic R. Jeffrey, president, National Zinc Company, recommended that the duty on slab zinc be raised to 2.50c a pound and that on zinc ores and concentrates to 1.75c.

David Laine, Secretary, American Die Casting Institute, urged the immediate removal of quotas on slab zinc imports and the temporary suspension of duties. He also asked the release of Government stocks of premium grades of zinc now held in the

(Continued on Page 15)

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Marked Improvement Likely in

The World Tin Picture in 1960

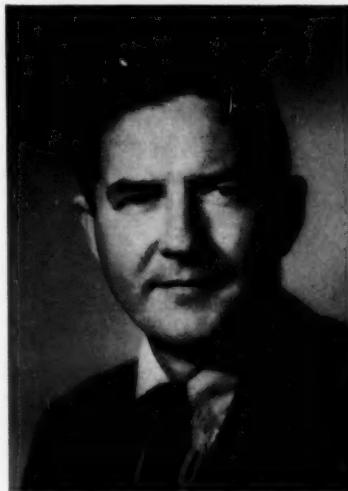
By R. D. COURSEN, Director, The Malayan Tin Bureau

INETEEN hundred and sixty should bring about a marked improvement in the international tin picture, in comparison with the situation that has existed for the last two-odd years. To determine why producers, particularly those in Malaya, feel optimistic, it is necessary to review a certain amount of statistical material. It will be recalled that on December 15, 1957, the free-World tin producing nations, through their membership in the International Tin Council, agreed to limit their exports in order to more effectively balance world production and consumption. In the last full year prior to the imposition of these controls under the International Tin Agreement, production in the six member countries — Malaya, Bolivia, Indonesia, Belgian Congo and Ruanda-Urundi, Thailand, and Nigeria — was 154,938 long tons. Mathematically, this equals an average of 38,735 long tons per quarter.

Keeping this figure in mind, let us see what has happened to the allowable exports of these countries under the controls. In the period from December 15, 1957 through March 31, 1958 the quota was set at 27,000 long tons. The second control period (2nd Quarter, 1958) was 23,000. Quotas for the closing two quarters were 23,000 and 20,000 long tons. In 1959 the quarterly quotas were 20,000, 23,000, 25,000, and 30,000 long tons. The first quarter, 1960 quotas have been set at 36,000 long tons. It is evident that the severe sacrifices made by the tin producers had resulted in a more stable market, allowing for gradual increases as consumption and demand increased.

Effect of Quotas

The effect of these controls on the world's largest tin producer — Malaya — were even more serious than on the aggregate six nations. Suffice it to say that the severity of the controls on Malaya was exceptionally heavy because the base period used for the quota controls presented sta-



RALPH D. COURSEN

tistics which tended to place unusual burdens on those countries whose production rise had been uninterrupted since 1946.

Wholly apart from the gradual lessening of the severity of controls under the International Tin Agreement, the Malayan tin producers have other reason for what they like to describe as "cautious optimism." In the first place, many mines were forced since December, 1957 to shut down completely or to operate on a very limited basis. This has given time for the study of new techniques of treatment of concentrates in cleaning plants, as well as the increased recovery from mining processes by dredge, by monitor, and by dry mining techniques. As a result, many mines, particularly those in the Asian sector, will in 1960 be operating with more modern, more efficient, and incidentally more costly, equipment than has ever been true in the past.

Climate for Enterprise

Secondly, the climate for private enterprise in Malaya is extremely favorable. The freeing-up of dollar exchange, the encouragement of private

capital through the passage of legislation favoring pioneer industries, and extending special considerations tax-wise to them — these are a few of the reasons why Malaya is experiencing a comparatively more prosperous time than most, if not all, of the Southeast Asian countries. This fact has not been lost on Americans, as witness the opening of branches of two major U. S. banks, and the building by U. S. connected firms involved in oil refining, soap manufacture, copra, fertilizers, etc.

Thirdly, the political climate in Malaya is extremely sympathetic to private enterprise because it consists of a fine balance between the various ethnic and racial groups. The conservative-minded amalgamation of Malays, Chinese, and Indians known as the Alliance Party won a resounding victory and a minimum five-year term of office in the national elections concluded in September, 1959. It has been both the policy and the practice of the Alliance to encourage the development not only of its two principal resources — tin and rubber — but also secondary industry. It has also successfully invited such enterprises as the Bank of America and the National City Bank of New York to establish operations in the Federation.

The Federation Government, recognizing the seriousness of the problems facing its neighbors in Southeast Asia particularly, and Asia generally, have approached the problems of race, economics, and social welfare from a conservative viewpoint. They have not attempted to solve the problems of their country overnight but have instead, to borrow an expression of one of their leaders, "learned to walk before they will run."

Long-Term View

Fourthly, a combination of the three principal climactic elements mentioned before has led the Malayan tin mining industry to take a long-term view of the world tin situation.

(Continued on Page 15)

Brass Mills, Ingot Makers Expect

Copper to Be Ample by Mid-1960

By EUGENE D. EMIGH, The American Hardware Corporation

TWO facts stand out in a review of 1959 experience of brass mills and ingot makers: (1) brass mills and ingot makers had enough copper to maintain production throughout the 5-month strike of major U. S. mines. (2) the price rise was not as sharp in 1959 as it had been in 1955 under similar circumstances. The supply and demand factors, in the free-world copper markets, explain the 1959 strength of copper and indicate the pattern for 1960 with respect to deliveries, inventories and prices.

The U. S. mine strikes in 1959 shut down 80 per cent of U. S. mining and smelting facilities for most of a five-month period. In other words, we lost 1/3 of the 1959 production of the copper mining and smelting industry in the United States. This loss was made up by imports of 400,000 tons from foreign producers without reducing their inventories and without interfering with the supply of copper to foreign fabricators. Foreign producers were able to pick up this added burden because of the increased foreign mine and smelter capacity in the past two years. This factor becomes increasingly important in 1960 because new copper facilities will be opened in Australia, Chile, Rhodesia, Russia and China.

Ample Supply Seen

Free-world production and consumption of copper in 1959 equalled the average of the past 5 years. Even though a higher 1960 demand for copper is expected for both foreign and domestic consumption, it is reasonable to expect that expanded free-world production facilities will take care of this increased demand, will build strong inventories by mid-1960, will necessitate resumption of measures to stabilize copper markets. These developments are contingent upon continued production in all principal domestic and foreign mines. The stabilization movement will be successful to the extent that producers can be relied upon to cooperate with each other.

We have been interested in mak-

ing a comparison of the 1955-56 price pattern with the more recent 1958-59 price pattern. It will be recalled that in 1955 domestic and foreign mining capacity was barely adequate to meet the demand for copper. The marginal U. S. mines were kept open at high cost to pick up part of the needed copper supply. Custom smelters were not shut down by the 1955 strikes and their increased demand for scrap forced prices higher on secondary copper. Under 1955 conditions the London copper price followed the U. S. custom smelter price to a peak 54c and higher.

By 1959 foreign mine capacity had been substantially increased. Major U. S. custom smelters were shut down by the five-month strike and copper scrap was plentiful at reasonably low prices. Custom smelters remaining in production at 1959 sold their limited output at prices ranging above 35c. During the five-month strike U. S. producers prices were pegged at 33c and London copper prices held generally on the low side of 33c to absorb transportation cost and the U. S. import duty of 1.7c. With free-world supply continuing strong and U. S. mines and smelters resuming operations the copper supply should be back to normal by the second quarter of 1960. U. S. producers are concerned about the pressure of foreign production and about the loss of markets to other types of metal. For these reasons they will attempt to maintain the 33c price level throughout the first quarter and work back to a 30c copper price during the second quarter.

Brass mills anticipated the long copper strike by building heavy inventories of copper during the early months of 1959. These inventories lasted through the year-end but some mills are running short of copper and high-copper scrap. This condition reached a point in early January where brass mill production was curtailed on certain products made of copper and high-copper alloys. Such production difficulties are expected

to become more general in January and February but will be corrected as the copper deliveries from U. S. mines and smelters resume a normal pattern.

Ingot makers had a strong year in 1959 showing a 20 per cent increase over 1958 production. Scrap was plentiful throughout the strike period but ingot makers found it difficult at times to buy at economical prices. Scrap dealers misjudged the market and held for higher prices which did not materialize. The low demand for copper scrap was caused by the shutdown of major custom smelters by the strikes and the reduced demand for scrap at the brass mills. Because steel scrap was not moving during the strike, scrap dealers unloaded their non-ferrous metals to get money for wages and operating expenses. The ingot market is expected to continue strong throughout the first quarter and possibly adjust to a lower price by the end of the second quarter.

Outlook for 1960

For 1960 it is reasonable to expect considerable copper shortages in the early part of the first quarter. Production that was expected from U. S. smelters will be delayed because of plant problems arising from the long strike. For example, electrolytic copper held in the tank houses for so many months has picked up impurities and is not up to specification. In re-opening the smelting plants, it was found that furnaces required relining, water lines had been frozen and equipment was out of condition. Thus the lag in deliveries is expected to drag out longer than anyone had expected. Because of these conditions there will be strong pressures to increase the U. S. copper price to about 35c for a short period. Viewing the year 1960 as a whole, unless strikes develop around the Chile contract negotiations in April or serious trouble develops in African mines, it is reasonable to expect plenty of copper in 1960 and prices falling back to 30c by mid-1960.

Prediction for This Year:

Aluminum Shipments to Increase

By Business and Defense Services Administration, Commerce Department

ALUMINUM shipments by producers to consuming industries are expected to be up 10 to 15 per cent in 1960 over 1959.

Increased usage in construction, automobiles, appliances and other consumer goods are expected to be major contributing factors in the increase.

Shipments to consumers are estimated to be about 37 per cent more in 1959 than in 1958 and primary production should increase 25 per cent, to an estimated 1,950,000 tons. The year 1959 exceeded the previous peak of 1956 by 19 per cent in shipments and 16 per cent in primary production.

Trends in 1959

The aluminum industry produces pig, ingot, and semifabricated forms—sheet, plate, foil, rod, bar, wire, cable, extruded shapes, tube, powder, forgings, and castings. These products are used by over 25,000 plants in making thousands of end-items.

The long-term average rate of growth of the aluminum industry has been about 10 per cent per year, compared with an average 3 per cent growth for the economy as a whole. In 1959, shipments to consumers increased at a rate just about 3 times the rate shown by the overall index of industrial production.

Total shipments to consumers in 1959 are estimated at about 4.9 billion pounds, up 37 per cent from the 3.6 billion pounds in 1958. Major consuming industries are construction, transportation, consumer durable goods, machinery and equipment, and containers and packaging. Shipments of mill products and ingot to consuming industries are presented in Table 1 (appended).

Mill products in the first 10 months of 1959 increased 34 per cent over the same period of 1958, and ingot shipments (other than for conversion to mill products) were 57 per cent higher. Shipments were abnormally high in the middle of the year as the result of inventory building by consumers, who were taking advantage of the guaranteed price protection given by the major producers until June 30 and who were acting in anticipation of a possible strike. Shipments dropped sharply in August but

recovered somewhat in September. October shipments were up to about the average monthly level of the year. Producer inventories increased in the early months of the year and then declined through July as shipments exceeded production. With the lower level of shipments in later months, producer inventories again increased, but it is believed that year-end inventories will be not much different from the beginning of the year. No data are available on consumer inventories, but there is agreement that a substantial accumulation has occurred. However, the October level of shipments is evidence that this accumulation will not affect future producer shipments too greatly.

Ingot shipments, for other than conversion into mill products, include metal for castings, destructive uses, and exports. Shipments of castings as reported for the first 9 months of 1959 were up 40 per cent above the same period in 1958, but the actual increase is estimated at less than 30 per cent because revisions were made in the survey beginning with January 1959 which make the 1959 figures not strictly comparable with 1958. Reported figures are presented in Table 2 (appended).

In 1958, the producers shipped 323,128 tons of metal to the govern-

ment their "put rights." These rights were part of the contracts made by the Government with the primary producers to expand aluminum facilities after the beginning of the Korean conflict. Under these contracts, the Government for a period of 5 to 6 years following initial production from the facility is required to purchase metal from the new facility which the producer is unable to use or market in his normal operations. In the first 10 months of 1959, the producers shipped only 63,552 tons under these contracts. These contracts have now expired except for that of Harvey Aluminum (Inc.).

Domestic primary production in 1959 is estimated at 1,950,000 tons, just about the level scheduled at the beginning of the year, and 25 per cent above 1958. During the year, some upward revisions occurred, but subsequent cuts were then made. November production was about 80 per cent of installed capacity. Secondary recovery for 1959 is estimated at more than 25 per cent above 1958.

Imports of primary aluminum in 1959 are estimated at a little below 1958, but 1959 primary imports were about 13 per cent of domestic production. Imports from Canada dropped off by 21 per cent for the first

TABLE 1—NET SHIPMENTS OF ALUMINUM PRODUCTS TO CONSUMERS

Year	—January-October—		Percent change*
	1958	1959	
Total mill prods. & ingot...	3,570.4	2,934.8	+40.0
Primary and secondary ingot	973.5	789.5	+57.1
Mill prods. total	2,596.9	2,145.3	+33.7
Sheet, nonheat-treatable ...	944.4	783.4	+38.4
Sheet, heat-treatable	209.1	170.5	+17.4
Foil	199.6	163.0	+30.5
Rolled rod, bar, struct. shapes	75.8	60.4	+81.7
Wire, bare, conductor & nonconductor	44.2	36.0	+51.2
ACSR & bare alum. cable ..	174.8	148.9	+15.7
Wire & cable, insul. or cover.	51.0	41.1	+22.6
Extruded shapes, alloys other than 2000 & 7000 series ...	693.3	572.0	+36.4
Extruded shapes, alloys in 2000 & 7000 series	49.8	39.3	+2.3
Drawn tube	59.9	50.6	+23.7
Welded tube	18.7	15.4	+71.2
Powder & paste	25.6	22.1	+35.6
Forgings	50.7	42.6	+4.4

* Calculated from original figures in thousands of pounds.

Source: Bureau of the Census; October preliminary.

10 months, but imports from France, Austria, Norway, Italy and other countries increased.

Imports of semifabricated products almost doubled in 1959 over 1958, and represented over 6 per cent of domestic shipments in the broad categories involved; for certain specific products the percentage was higher. Imports for the first 10 months of 1959 of "plates, sheets, bars, rods, circles, etc." increased by 91 per cent and foil increased by 81 per cent as compared with the same period of 1958.

Exports of crude metal and scrap increased sharply during the year as compared with the previous year. Crude metal exports were up 83 per cent, reflecting shipments made by domestic producers to affiliated foreign plants, and scrap exports were up 47 per cent. The percentage of domestic primary production represented by crude metal exports increased from 3 per cent at the beginning of the year to about 8 per cent in October 1959, the last month for which exports are available. Scrap exports as a percentage of domestic consumption increased from 4 per cent at the beginning of the year to 8 per cent in October 1959.

Details on imports and exports are given in Table 3 (appended).

The price of aluminum pig in the U. S. was raised 1.3 cents a pound to 26 cents in mid-December, to bring

the price back to the 1957 level, following a $\frac{3}{4}$ cent increase earlier in other world markets by Aluminium Limited. The price had been cut in April 1958 from 26 cents to 24 cents, and a price of 24.7 cents was set in August 1958.

Labor contracts with the major producers expired in August 1959 and work has continued with the understanding that any contract economic changes would be made retroactive to the contract termination date. A new contract for a 3-year period was signed in late December.

Industry capacity for producing primary aluminum was rated at 2,336,000 tons at the end of 1959, up 141,500 tons during the year. Another 269,000 tons is scheduled to be installed by 1961.

Capacity for producing semifabricated shapes was also expanded during the year. Two newly integrated producers began sheet-rolling operations, and a company producing utensils put in a hot rolling mill. A 14,000 ton and a 5,200 ton extrusion press were installed by an integrated producer. Producers continued their modernization of production facilities, expanded their research and development activities, and offered more diversified and new products.

Many new developments occurred in the industry in 1959. New and improved alloys were developed, one of

the new compact cars used an aluminum engine; prefabricated homes using extensive amounts of aluminum were sold in substantial number; a new building sheet was introduced; new types of aluminum cans were introduced; a large order for gondola railroad cars and covered hoppers was placed; and new military applications were developed.

The 1960 Outlook

The 1960 outlook for aluminum is for continuing growth, which is expected to be from 2 to 2½ times the improvement expected in general industrial production. This assumes no major setback will occur as a result of strikes or other reasons.

Automobiles will use about 13 to 15 per cent more aluminum per car in 1960 than in 1959. The expected 22 per cent increase in the domestic production of automobiles indicates about a 40 per cent increase in the use of aluminum by the automobile industry. The overall physical volume of construction is expected to be about the same in 1959 as in 1958, but more aluminum is expected to be used. Appliances and other consumer goods will be produced at a higher rate in 1960, it is anticipated, and will use more aluminum, as will various types of machinery and equipment. Increasing amounts of aluminum will be used in containers and packaging with the increased use of foil packaging and aluminum cans. More aluminum is also expected to be used for steel deoxidizing and for alloying with other metals. As for defense uses, aircraft programs are expected to take less aluminum but other programs, such as missiles and equipment, are expected to take more.

Consumer inventories have been built up in 1959 and this will have an effect on producer shipments in 1960. On the other hand, the development of a few new major uses may stimulate consumption even more.

A reasonable expectation is for a 10 to 15 per cent improvement in 1960 shipments to consumers.

50 Million Lbs. Aluminum Seen Used in Cans in '60

More than 50-million pounds of aluminum will be used by America's can making industries during the coming year, according to a Kaiser Aluminum & Chemical Corp. survey.

This "conservative forecast" compares to an estimated 15,000,000 pounds of aluminum used in cans during 1959, it was stated.

TABLE 2—SHIPMENTS OF ALUMINUM CASTINGS

(Thousands of Pounds)

Year	January-September*	Percent change*
1958	1958	1959
Total castings	596,456	425,477
Sand	117,421	85,076
Permanent mold	185,599	132,498
Die	292,600	207,246
Other†	.....	.....

* Revisions in the survey were made beginning with January 1959 which increased the level of total castings by about 10 per cent; the level of permanent mold castings was raised by about 20 per cent.

† Not published because standard error too high.

Source: Bureau of the Census.

TABLE 3—IMPORTS AND EXPORTS OF ALUMINUM

(Thousands of Pounds)

Year	January-October—	Percent change
1958	1958	1959
Imports, total	592,015	485,715
Metal & alloys, crude	510,643	422,286
Scrap	19,843	15,655
Plate, sheet, etc.	55,887	43,535
Foil	5,542	4,152
Powder	100	87
Exports, total	174,866	141,829
Metal & alloys, crude	105,423	82,320
Scrap	37,812	31,878
Bars & rods	3,040	2,813
Wire & cable	8,748	7,866
Extruded & drawn shapes— & tubes	6,654	5,658
Plates & sheets	8,672	7,435
Foil & leaf	590	487
Powder & paste	662	548
Castings & forgings	3,265	2,824
		1,957

Source: Bureau of the Census.

TIGHTNESS OF PHYSICAL COPPER SUPPLY IN BRITAIN NOT AS APPARENT IN PRICES AS HAD BEEN EXPECTED

1960 Consumption Likely to Set Record High; Uncertainty Noted in Tin Market; Lead Improvement Anticipated; Zinc Outlook Favorable

January 7, 1960

THE continued reluctance of the American copper strikes to really come to an end has remained, of course, the keynote of the copper market. The fact that a resumption of full production has been expected from week to week for about a month now, does not alter the fact that the actual physical supply position of the metal gets steadily tighter and tighter although this is, perhaps, not quite as apparent in prices as might have been expected.

This is due to the fact that in the expectation of a resumption of full production fairly soon, some buyers are inclined to hold off the market in the hope of lower prices. Most experienced observers here now seem convinced, however, that the rebuilding of depleted inventories (particularly in America but, to a lesser extent, also elsewhere) will suffice to give the market a firm undertone for some months to come. The current guessing is that prices may well settle down somewhere in the region of £240 a ton

By L. H. TARRING
London, England

for at any rate the first quarter of the year.

European consumers have not had to draw on their stocks to anything like the same extent as have American users but it is thought that, as a whole, European buyers are rather underbought for the first quarter and there seems no doubt that all available first quarter supplies will be snapped up with the greatest readiness.

Consumption prospects in Europe and, indeed, for the whole world, for the coming months seem to be distinctly promising. The weakest spot here for some time, of course, has been the wire rod and wire section of the industry; but even this has recently had something of a "shot in the arm" by the receipt of orders from China for something like 25,000 tons of wire rod for delivery over the greater part of this year.

Naturally, everybody concerned with copper is busily trying to foresee the probable trend of events during the coming year but this seems to resolve itself into part serious statistical exercise and part guessing game. The guessing part comes in in trying to forecast whether 1960 will prove to be a miracle year by being devoid of serious strikes in the copper industry. However, all the economic pointers suggest that total consumption of copper this year will be larger than in 1959 and, in all probability, will constitute a record.

On the other hand, it has to be remembered that 1959 opened with a substantial theoretical surplus of capacity over estimated requirements and that this was becoming very apparent before the big U.S. strikes completely changed the supply picture. In 1960 production capacity will be appreciably larger than it was in 1959 and, even allowing for a very favorable rate of consumption, seems likely to be appreciably larger than consumption.

Given uninterrupted output at all

the major producing centres throughout the year one might expect therefore that after a good tone in the first few months while consumers are rebuilding depleted inventories, stocks will gradually build up. Unless producers are prepared to take prompt action in trimming the rate of production to the level of demand, some downward pressure on prices might ensue.

A feature of the last year or two has been the substantial increase in the world's electrolytic refinery capacity which seems likely to lead to a marked shrinkage in the volume of blister copper coming on to the open market and may well pose some serious problems for fire refineries in the future. In this connection, it may be recalled that in 1959 the Ndola refinery in Northern Rhodesia came into operation, treating largely Roan Antelope blister and Kennecott have been busily building a new electro refinery near Baltimore (based on Braden blister) which is currently starting to come into production. It is understood that all the big blister output of the Southern Peru Corporation will be marked as electro after being converted in the U.S.A. and

U. K. COPPER STATISTICS
According to the British Bureau of Non-Ferrous Metal Statistics, production of refined copper during October fell to 7,992 tons of primary (9,320 tons) and 9,194 tons of secondary (9,964 tons). Stocks of refined copper again showed a decline in October at 54,002 tons (66,178 tons) as did blister at 10,600 tons compared with the September total of 11,625 tons. Of the refined stocks, consumers held 28,518 tons compared with 34,232 tons the previous month. There was an increase in consumption at 61,101 tons (57,367 tons). Details are given below:

—10 months ending—			
	Oct.	Oct.	Oct.
	1959	1958	1959
Copper Products:			
Wire*	22,202	241,239	183,887
Rods, bars & sections	2,031	17,699	16,110
Sheet, strip & plate	5,498	47,327	47,657
Tubes	6,840	51,645	54,634
Castings & miscellaneous	650	6,500	6,500
Alloyed Copper Products:			
Wire	1,812	12,893	14,790
Rods, bars & sections	13,711	98,555	113,398
Sheet, strip & plate	10,163	73,874	84,057
Tubes	2,230	19,399	18,066
Castings & miscellaneous	6,988	61,003	60,857
Copper sulphate	1,413	21,422	27,218
Total all products	73,448	651,556	627,174

Copper content of output	61,101	550,823	512,765
Consumption of refined copper†	47,345	440,719	386,935
Consumption of copper and alloy scrap‡ (copper content)	13,756	110,104	125,830

* Consumption of H. C. copper and cadmium copper wire rods for wire and production of wire rods for export.

† Virgin and secondary refined copper.

‡ Consumption of copper in scrap is obtained by the difference between copper content of output and consumption of refined copper, and should be considered over a period since monthly figures of scrap consumption are affected by variations in the amount of work in progress.

U. K. TIN STATISTICS
Tin consumption during October showed a decline at 1,915 tons compared with 2,073 tons in September, according to the British Bureau of Non-Ferrous Metal Statistics. Production showed a further gain of 3,101 tons (plus 30 tons secondary) compared with 2,229 tons (20 tons) the previous month. Stocks again showed a slight decline at 10,624 tons against 10,752 tons in September. Details of consumption of primary tin are given below:

—10 months ending—			
	Oct.	Oct.	Oct.
	1959	1958	1959
Tinplate	860	8,108	8,198
Tinning:			
Copper wire	40	425	446
Steel wire	41	80	88
Other	68	614	653
Total	119	1,119	1,187
Solder	229	1,562	1,886
Alloys:			
Whitemetal	248	2,378	2,460
Bronze & gunmetal	198	1,906	1,675
Other	44	340	363
Total	490	4,624	4,498
Wrought tin*			
Foil & sheets	44	208	273
Collapsible tubes	34	235	201
Pipes, wire & capsules	2	32	30
Total	80	475	504
Chemicals†		835	
		187	1,195
Other uses‡		98	
Total all trades	1,915	16,817	17,468

* Includes Compo and 'B' Metal.

† Mainly tin oxide.

‡ Mainly powder.

AVERAGE BRITISH PRICES FOR COPPER, TIN, LEAD, ZINC

(Per Long Ton)

Mean of Bid and Asked Cash Quotation at Close of Morning Session on London Metal Exchange

	COPPER			TIN			LEAD		ZINC	
	Cash	3 Months	Settlement	Cash	3 Months	Settlement	Current Month	3rd Following	Current Month	3rd Following
£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
1954 Averages	248 17 11	239 17 7	249 0 11	719 8 11	709 17 7	720 6 7	96 8 12	94 7 4	78 5 4	66 16 11
1955 Averages	351 14 11	341 0 3	352 5 6	740 2 12	736 12 11	740 12 8	105 17 3	105 9 6	90 13 4	89 12 3
1956 Averages	328 14 5	324 13 1	328 1 8	787 14 9	774 7 7	788 13 3	116 6 5	114 8 9	97 14 3	95 3 7
1957 Averages	219 8 10	221 0 3	219 12 10	754 15 4	747 10 10	755 3 11	96 12 9	96 13 2	81 11 7	80 1 1
1958 Averages	197 13 3	197 9 3	197 16 11	734 18 6	734 17 11	735 6 1	72 15 8	73 6 10	65 17 12	65 10 12
1959										
January	230 2 0	227 5 10	230 5 0	758 15 6	759 4 9	759 2 10	71 17 0	72 3 3	74 17 8	72 18 8
February	236 2 0	235 10 8	236 7 6	772 9 9	773 9 0	772 15 0	69 19 4	70 16 6	73 13 8	71 19 8
March	248 10 3	247 12 2	248 13 6	779 14 9	783 5 9	780 1 6	69 10 3	71 4 2	75 2 5	78 18 8
April	240 0 5	240 6 6	240 3 5	782 5 8	783 15 5	782 11 4	69 1 0	70 8 4	72 13 9	72 9 2
May	236 4 2	236 11 6	236 6 9	784 4 3	784 10 9	784 10 0	70 16 0	71 13 10	77 7 1	75 17 6
June	230 0 11	230 0 4	230 3 8	788 7 9	789 8 10	788 14 1	69 13 4	71 5 8	78 8 2	77 6 11
July	220 17 6	221 14 9	221 0 3	792 6 6	790 16 4	792 13 6	70 5 0	71 1 2	80 10 7	79 13 4
August	232 16 9	231 9 3	233 0 0	792 18 6	791 18 3	793 4 6	72 3 3	73 3 1	85 5 11	83 19 5
September	230 7 6	230 8 8	230 10 3	792 15 0	792 6 4	793 0 5	70 14 5	72 1 10	86 1 5	84 19 10
October	241 18 5	236 17 5	242 2 11	794 2 9	794 8 2	794 8 2	70 12 5	71 12 2	91 7 4	89 9 2
November	250 11 8	241 7 7	250 18 1	795 7 5	795 14 6	795 18 4	72 2 11	72 7 10	94 18 8	90 3 7
December	255 8 10	239 15 1	255 14 7	789 3 2	785 6 8	789 11 4	72 13 11	72 9 0	95 3 10	90 3 3
1959 Averages	237 13 1	234 15 7	237 16 8	785 7 10	785 10 0	785 14 2	70 15 7	71 13 9	82 4 8	80 5 4

Europe under period contracts and now Anaconda has announced its intention of building a new electrolytic refinery in Chile which will treat a good deal of material from El Salvador. In the Belgian Congo, work is still going on at the new Luulu electrolytic refinery which is expected to start up later this year and work up to an annual output of 50,000 tons.

Tin Holds Stable

On the surface, the tin market has continued to look fairly stable during the past month but underneath there has been a degree of uncertainty in the minds of dealers and consumers as to whether consumption in the opening months of 1960 would be large enough to absorb the much increased quotas which came into force on January 1st. Until just recently this aspect was further complicated by uncertainty as to whether there would be a rerudescence of the U.S. steel strike but fortunately that threat has now been removed and it is assumed that U.S. tin consumption will run at a high level. Indeed, by comparison with recent years, world consumption is expected to make quite a good

showing as the tinplate, motor car and other consuming industries seem headed for a period of high production.

Even so, current estimates foreshadow a surplus of supplies over demand on the assumption that Russia and China will continue to ship tin to the western world. This is the biggest unknown at the moment as although it is coming to be believed that Russian supplies are likely to be less of a menace than they were in 1958 and 1959, everyone is asking what China will do. Obviously the Buffer Stock Manager has ample funds to support the market should the need arise but it is hard to credit that the International Tin Council will wish to see the Buffer Stock built up to anything like its maximum potential in the final 18 months of the present Agreement—at any rate until it is definitely known whether the Agreement will be renewed. For the time being, however, prices seem to be holding their own quite well.

Export Lead Improvement

Although it has not been officially announced, it is generally understood that producers concerned with the voluntary curtailment of supplies to the world market during 1959 are prepared to continue these in force for at least another six months. There have been indications recently that the European supply position has become less top heavy than it was earlier in the year and prices have reflected this to some extent. If supplies are kept down to the level of recent months, it is expected that there will be some further moderate improvement in prices, probably to around £80 a ton, as consumption is running at a reasonably good level thanks to the generally favorable economic conditions throughout Europe as a whole.

It remains true that consumption is not expanding to the extent that the general level of trade might have led

one to hope, so that it is not easy at the moment to see just how, or when, the supply restrictions will be able to be removed. At least it can be said, however, that the lead market is now on a firm economic base free from artificial Government support in America or elsewhere. The next meeting of the International Lead and Zinc Study Group has now been fixed for January 27th in Geneva when, no doubt, the whole situation will be reviewed. It will be surprising, however, if anything very startling emerges from this meeting apart from an official announcement to the effect that output restrictions will be continued.

Zinc Little Changed

On balance, there has been little change in zinc prices on the London market during the past month. With a further 3,000 tons of British Government stocks being released during January, consumers are not over anxious.

(Continued on Page 14)

U. K. ZINC STATISTICS

According to the British Bureau of Non-Ferrous Metal Statistics, zinc stocks in the U. K. declined to 56,697 tons (47,547 tons imported and 9,150 tons of English refined) against the September figures of 63,121 tons (52,816 tons imported and 10,305 tons of English refined). Production during October dropped to 8,765 tons compared with 8,817 tons a month earlier. Full consumption details are given below.

Oct. 10 months ending—		Oct. Oct. 31
Oct. 1959		1958 1959
Cables	8,948	83,810 78,652
Batteries — as metal	2,922	24,432 24,583
Battery oxides	2,402	21,909 22,115
Tetraethyl lead	1,994	16,155 19,151
Other oxides & compounds	3,112	21,267 22,357
White lead	825	5,531 6,771
Shot	358	3,863 3,317
Sheet & pipe	6,860	55,533 57,267
Foil & collapsible tubes	440	3,485 3,058
Other rolled & extruded	724	4,869 5,661
Solder	1,377	11,110 12,148
Alloys	1,723	15,584 14,968
Miscellaneous uses	1,241	10,432 11,514
Total consumption	32,926	279,980 281,552

of which:

Imported virgin lead	15,597	138,847 143,281
English refined	8,439	63,316 62,454
Scrap including remelted	8,890	77,817 75,817

—10 months ending—		Oct. Oct. 31
Oct. 1959		1958 1959
Brass	10,582	78,689 88,690
Galvanizing	8,125	74,265 78,903
of which:		
General	3,120	27,840 27,925
Sheet	1,762	17,612 19,667
Wire	1,773	16,902 16,587
Tube	1,470	11,911 14,724
Rolled sheet	2,294	21,080 19,838
Zinc oxide	2,368	22,280 23,342
Zinc diecasting & forming alloy	5,404	40,267 45,459
Zinc dust	1,038	8,569 9,610
Miscellaneous uses	875	9,218 8,990
Total all trades	30,686	254,368 274,832
of which:		
Slab zinc		
High purity (99.99%)	5,891	43,777 49,277
Electrolytic & high grade (99.95%)	6,005	48,788 51,737
G.O.B. Prime Western & debased	11,192	93,015 100,991
Other virgin material	220	2,406 2,053
Remelted zinc	479	4,486 4,721
Scrap—(zinc content)		
zinc metal, alloys & residues		
Brass & other copper alloys	4,213	35,744 39,121

Metals, January, 1960

DOMESTIC COPPER MARKET FRUSTRATED OVER FAILURE TO END STRIKES AND RESUME UNIMPEDED PRODUCTION

Producers Hold at 33.00c and Custom Smelter at 35.00c; Zinc Advanced 0.50c to 13.00c for Prime Western at E. St. Louis; Lead Quiet but Firm at 12.00c Basis

January 22, 1960

FRUSTRATION over failure to clean up the copper strike situation continued to prevail during the month. Although scattered settlements were reached, Kennecott was still bogged down in a dispute with three craft unions while Anaconda and Phelps Dodge were morassed in negotiations with the International Union of Mine, Mill and Smelter Workers.

Despite the copper strike snafu and the uncertainties when full production will be resumed, consumers showed a surprising lack of interest in acquiring the red metal. Prices were unchanged with producers quoting 33.00c a pound and one custom smelter selling for March delivery at 35.00c. Among the other metals, zinc was strong and advanced to 13.00c for Prime Western at East St. Louis while lead was quiet but firm at the 12.00c quotation at New York.

If in August anyone had been asked what the price of copper was likely to be if the strikes lasted into mid-January, the answer probably would have been 40.00c to 50.00c a pound. At the present time brass mills are hesitant buyers at above 37.00c a pound and only wire mills that are hard pressed for copper are known to be paying 37.50c for January metal. The fabricators are believed to be stretching their available supply as much as possible, hoping that by the time they have to scrape the bottom of the barrel, the strikes will be over. The factor that makes fabricators resist paying the higher prices that are being asked in the outside market, is that their products are being priced on a 33.00c copper market and they see no prospects of being able to recover any portion of the premiums. There appear to be little or no prospects of the producers raising their price above the 33.00c level.

Domestic Deliveries Dip

Domestic refined copper production and deliveries increased in December as stocks decreased, according to figures compiled by the Copper Institute. The 1959 totals, compared with those for the preceding

year, showed an increase in deliveries and declines in production and stocks.

Deliveries to fabricators in December were 90,123 tons, an increase of 6,497 tons over November's 83,626 tons. For all of 1959 deliveries rose to 1,312,412 tons from 1,179,416 tons.

Refined production in December at 46,302 tons was 9,003 tons more than the 37,299 tons turned out in November. But output for the year came to 1,221,612 tons, or 224,928 tons less than the 1958 total of 1,446,540 tons.

Refined stocks at the end of December dipped to 64,763 tons, or 9,879 tons less than the 74,642 tons on hand at the end of November. Stocks at the end of 1958 amounted to 80,722 tons.

Outside the United States crude production, refined production and deliveries showed increases in December over November, with refined stocks declining.

U. S. Consumption Off

U. S. consumption of refined copper by brass and wire mills and by nonferrous metal foundries declined sharply in December but for all of 1959 showed an increase over 1958. December consumption, at 88,706 tons, was 14,131 tons less than the 102,837 tons consumed in November. It also was the lowest for any month since the 81,500 tons consumed in the vacation month of July last year.

Domestic consumption of refined copper for all of 1959 came to 1,347,610 tons, or 181,481 tons more than the 1,166,129 tons for 1958.

The volume of new business that fabricators booked from their customers in December (in terms of refined copper) amounted to 67,039 tons, a sharp drop of 48,881 tons from the November level.

Since the fabricators' new bookings in December lagged behind shipments by 21,667 tons, their unfilled orders at the end of December declined by that amount bringing them to 202,775 tons.

Fabricators' stocks of refined copper at the end of December came to 414,757 tons, a gain of 2,356 tons over the preceding month. In addition

they had on order with producers 130,324 tons, so that their gross reserve was 545,081 tons. Of this total 340,349 tons were working stocks, so that their net reserve was 204,732 tons. Since their unfilled orders called for the use of 202,775 tons, they had a theoretical excess of 1,957 tons.

At the end of December the industry's stocks of refined copper in the hands of producers, fabricators and warehouses, amounted to 478,581 tons, an increase of 21,538 tons over the 457,043 tons at the end of November.

Situation in Lead

No longer affected by the strikes which are still snarling the copper industry, the lead market was on a quiet but firm basis. Most consumers were buying at the spot quotation, indicating that they did not expect the price to go below 12.00c New York. There was a heavy surge of buying early in January which subsided while consumers digested their stocks.

Discussing the outlook for lead, the Business and Defense Services Administration predicted that demand this year will probably show an increase of approximately 3½ per cent over the 1959 estimated figure of 1,100,000 short tons. This forecast is based on expectations of a moderate increase in requirements for storage batteries, tetraethyl lead, pigments, and solder. The 1959 total is about 11.6 per cent greater than the 986,000 tons consumed in 1958.

Lead consumption for batteries in 1959 is expected to be approximately 21 per cent higher than in 1958. This is due partly to the normal average annual increase in replacement batteries resulting from the ever-increasing number of cars and trucks in operation, partly to increased requirements for new car and truck production, replenishing of stocks of finished batteries in inventories, above normal replacement purchases resulting from customer deferral in 1958, and increased industrial requirements as a result of the step-up in industrial production over 1958.

Lead requirements for tetraethyl lead, used in the production of ethyl

gasoline, are expected to show a slight increase in 1959. This reversal of the downward trend of the two previous years is principally the result of a leveling off in the inroads being made in the high octane markets by the expanded production of high test gasolines made possible by improved refining methods.

Lead consumption for cable covering continues to decline as a result of a continued substitution of plastics, and aluminum for lead. Consumption of solder, caulking lead, and other metal products is expected to show a substantial increase for the current year, reflecting the higher levels of construction, and durable goods production, for 1959.

The estimated increase of approximately 22 per cent in automobile production in 1960, together with the 1959 net increase of around 2,000,000 new automotive vehicles added to the number already in use, is expected to increase lead consumption for batteries by almost 5 per cent in the coming year.

Consumption for tetraethyl lead in 1960 is expected to exceed estimates for 1959 by about 3½ per cent. This is based largely on the assumption that the present ratio of tetraethyl lead consumption to total gasoline consumption (because of declining aviation requirements as a result of the replacement of propeller driven planes by non-gasoline consuming jets) will continue unchanged in 1960.

In the metal products area, lead requirements for solder, ammunition, and several lesser categories are expected to more than offset a further decrease in lead cable covering.

Requirements for lead for pigments (principally red lead and litharge) are expected to increase between 5 and 8 per cent over the quantities used during the current year.

Optimism Over Zinc

The Government was also optimistic over the zinc outlook. BDSA said consumption of slab zinc in 1960 is expected to be approximately 15 to 17 per cent higher than 1959's estimated figure of 940,000 short tons. Consumption in galvanizing is expected to increase 40 per cent over last year's estimated 340,000 tons. Zinc base alloys for die castings should consume 6 to 7 per cent more zinc in 1960 in view of forecasts of increased automobile production. Brass mill requirements for zinc are expected to rise about 3 to 4 per cent.

Reflecting the improved market position, Prime Western Zinc moved up to 13.00c at East St. Louis. Even

prior to the boost, most producers of Special High Grade and regular High Grade advanced their premiums on these grades by 0.25c a pound. The new premiums are 1.75c and 1.50c a pound, respectively. The American Smelting and Refining Company, which did not advance its premiums, was expected to do so in the near future.

Zinc Statistics Bullish

The December zinc statistics were extremely bullish. The industry had anticipated a drop in zinc stocks of 20,000 to 25,000 tons. The actual reduction at the end of December was 21,738 tons, according to figures compiled by the American Zinc Institute. That decrease was due to the fact that the December shipments exceeded production by that amount. Since the beginning of 1959 the producers' zinc stocks have been reduced by 35,818 tons so that at the end of December they were 154,419 tons, the smallest that they have been since the end of November, 1957.

Domestic production of all grades of zinc in December came to 69,666 tons, a gain of 7,320 tons over November. Production is being kept down by the strike at the Anaconda properties.

The shipments to domestic consumers of all grades of zinc in December were 84,498 tons, an increase of 9,902 tons over November. For all of 1959 the shipments to consumers totaled 872,867 tons as against 767,735 tons in 1958, an increase of 105,132 tons or about 12 per cent.

Shipments for export and drawback in December were 6,906 tons as against 2,844 tons in November, a gain of 4,062 tons. That made the combined December shipments, 91,404 tons as compared with 77,440 tons in November, a gain of 13,964 tons. For all of 1959 the total shipments of all grades of zinc were 893,838 tons as compared with 805,325 tons in 1958, an increase of 88,513 tons.

Aluminum Output Up

Production of primary aluminum in the United States totaled 162,996 tons during December, an increase of 9,330 tons over the 153,666 produced in November, according to The Aluminum Association. Output in December of the preceding year came to 152,301 tons.

For all of 1959, primary aluminum output came to a new record annual high of 1,953,039 tons, an increase

of 387,483 tons over the 1,565,556 tons turned out in the preceding year.

Little Change in Tin

There was little change in the tin market during the month despite the removal of the strike threat in the steel industry. Spot Straits tin closed at 100.50c a pound on January 21, 1960 against 99.00c a pound on December 21, 1959.

Platinum Metals Higher

Platinum metal prices moved higher. The refiners' price for platinum advanced \$5 an ounce to \$82 in wholesale quantities and \$85 in retail lots. Palladium was boosted \$2 an ounce to \$24 to \$26 and rhodium was lifted \$15 to \$137 to \$140 an ounce.

Cadmium Advanced

A large producer of cadmium sticks, bars and platers' shapes announced a price advance of 10.00c a pound to a basis of \$1.50 a pound in lots up to one ton. The increase was attributed to heavier demand, both at home and abroad.

British Metal Markets

(Continued from Page 12)
ious with regard to the maintenance of adequate spot supplies. Nevertheless nearby metal continues definitely tight as is evidenced by the persistent substantial backwardation in L.M.E. prices. It is understood that the restrictions on supplies to the world market that were instituted last year are being lifted as from the beginning of 1960 and this should eventually ensure a sufficiency of zinc for all needs; but obviously it will take several months before the full impact of this is felt in the main consuming countries.

Meanwhile, the general picture with regard to consumption remains a favorable one as all the main zinc-using industries are busy and expect to remain so for months to come. Indeed, in several directions it is expected that further progress will be seen during 1960. The zinc alloy diecasting industry is particularly active and to some extent further progress is held up by lack of spare productive capacity.

In brass, it remains to be seen whether the recent tempo will be fully maintained when the American copper strikes are over and U.S. demand for brass products tapers off. Even so, with the electrical industry, motor cars and general engineering looking prosperous at the present time, brass should be in for quite a good year.

Washington Report

(Continued from Page 4)
national stockpile to restore commercial stocks to adequate levels.

Raymond F. Orr, president, Athletic Mining and Smelting Company, asserted that his company "is opposed to the quota procedure which in the long run can only reduce smelting capacity and make this country more dependent on importations of slab zinc which in a seller's market will be at whatever price foreign producers think the traffic will bear."

Herman D. Carus of Matthiessen & Hegeler Zinc Company said that, if the commission feels it should recommend to the Senate that duties on zinc should be raised, "differentiation should be made between slab zinc, which is in plentiful supply because our national productive capacity is close to our consumption, and concentrates, of which we have a deficiency of 40 to 50 per cent. It is our recommendation that the duty on zinc in concentrates be 50 per cent of the duty on slab zinc. Ore quotas then should be removed so that custom smelters would be allowed to produce their normal production of slab zinc."

Value of Mineral Output

Despite a slight rise in the total value of mineral output in the United States in 1959, a number of commodities — principally metals where strikes suspended operations — did not follow the upturn in economic activity, the Bureau of Mines, Department of the Interior, reported in a year-end summary.

The Bureau, in preliminary figures, estimated the value of mineral production for 1959 at \$17,100,000,000, compared with 1958's \$16,500,000,000. The record, \$18,100,000,000, was established in 1957.

The Bureau said the 1959 total value of all minerals, including fuels, was 2 per cent higher than in 1958, due largely to increased production in certain lines, since unit values were mostly steady. The few price increases for some products were offset by decreases in others. Nonmetal construction materials, crude petroleum, and natural gas contributed most of the increase in total value. Total value of fuels output rose from \$11,600,000,000 in 1958 to \$11,900,000,000 in 1959.

Among the materials registering declines in total value in 1959 were lead, fluorspar, silver, iron ore, an-

thracite coal, manganese ore, mercury, copper, gold, and chromite.

A 116-day steel strike led to a 12 per cent drop in the value of usable iron ore produced and was the principal factor in decline in value of metals output, from \$1,597,000,000 in 1958 to \$1,550,000,000 in 1959. Large increases in the mining of uranium ore, bauxite, and molybdenum compensated for part of the reduced value for other minerals. A strike in the copper industry reduced the quantity of refined copper from United States mines nearly 16 per cent. Lead and zinc quantities also dropped, but the combined total value of copper, lead, and zinc rose slightly because of higher prices.

Hunt Depleted Uranium Use

The Department of the Interior also disclosed that four Bureau of Mines research centers are cooperating with the Atomic Energy Commission in studies to find uses for mounting stockpiles of depleted uranium — a byproduct of the enriched uranium produced for the AEC.

The AEC already has on hand substantial quantities of this material in the form of uranium hexafluoride (called "depleted uranium" because most of the fissionable component, U-235, has been removed). Several thousand tons of this material probably could be made available each year, if Government or industry can develop applications for it, the Department explained.

Bureau of Mines studies — partly supported with AEC funds — are aimed at finding large volume uses for depleted uranium in the metallurgical and petroleum industries.

Government to Sell Nickel

In another development, the Government announced plans to sell approximately 19,000,000 pounds of cathode nickel from the Defense Production Act stockpile.

The General Services Administration said sales of the metal will be for domestic consumption. To accommodate small business requirements, the agency said it would accept orders as small as 20,000 pounds. The maximum sale in any one transaction will be 1,000,000 pounds, according to GSA.

The agency cited no specific selling price. It said inquiries should be directed to the Defense Materials Service, General Services Administration in Washington, attention George Castro.

The nickel was authorized for release by the Office of Civil and Defense Mobilization. GSA also was authorized to substitute approximately 16,000,000 pounds of cathode nickel

in the DPA inventory for sintered nickel from Nicaro production to pay balances due to previously negotiated settlements of premium-priced contracts.

Tin Also on Sale

GSA also reported that 537 long tons of Copan tin alloy held in the Government's inventory of defense materials would be offered to commercial users in the immediate future on a sealed bid basis. The agency had stated previous that the material would be made available at an established price.

The alloy was produced at the Texas City tin smelter when it was Government-owned.

In announcing the sealed bid sale, GSA officials said that offers on minimum quantities of five long tons or units of five long tons, f.o.b. storage site would be considered with the Government's right to reject all bids if not satisfactory. Bids will be accepted until the close of business on March 11.

The Copan is located for the most part at Granite City, Ill. with smaller amounts stored near Baltimore, Md. and Royce, N. J.

World Tin Picture

(Continued from Page 7)

In conjunction with the Government, they are attempting to create a sensible land development scheme which will recognize the asset-wasting nature of tin mining. They are pressing for further exploration and are involved in research aimed at returning used mining land to the production of agricultural crops. In their efforts the industry has received general approval.

Finally, as far as 1960 is concerned, the tin mining industry of Malaya recognizes that forces beyond their control will largely determine their relative success for the year. The largest of these factors, of course, is the U. S. consumer. The largest single segment of the U. S. consuming market is the steel industry, which manufactures tinplate. This one industry accounts for some 60.7 per cent of all of the virgin tin used each year in the United States. By and large, the consumption of tinplate, as well as the other major uses of tin including solder, bronze and brass, babbitt, and white metal alloys, appears destined for increased use here during the coming year.

Daily Metal Quotations for December, 1959

The following quotations are taken from the Daily Metal Reporter.
(In Cents Per Pound)

	Copper	Tin Straits New York	Lead	Zinc	Alumi- num	Anti- mony	Silver	Cent's Per Ounce	New York	
1	33.00	Nom.	99.375	99.375	13.00	12.80	12.50	13.00	12.75	13.75
2	33.00	Nom.	99.50	99.50	13.00	12.80	12.50	13.00	12.75	13.75
3	33.00	Nom.	99.50	99.50	13.00	12.80	12.50	13.00	12.75	13.75
4	33.00	Nom.	99.375	99.375	13.00	12.80	12.50	13.00	12.75	13.75
5	33.00	Nom.	99.125	99.125	13.00	12.80	12.50	13.00	12.75	13.75
6	33.00	Nom.	99.625	99.625	13.00	12.80	12.50	13.00	12.75	13.75
7	33.00	Nom.	99.75	99.75	13.00	12.80	12.50	13.00	12.75	13.75
8	33.00	Nom.	99.50	99.50	13.00	12.80	12.50	13.00	12.75	13.75
9	33.00	Nom.	99.00	99.00	13.00	12.80	12.50	13.00	12.75	13.75
10	33.00	Nom.	99.125	99.125	13.00	12.80	12.50	13.00	12.75	13.75
11	33.00	Nom.	99.00	99.00	13.00	12.80	12.50	13.00	12.75	13.75
12	33.00	Nom.	99.00	99.00	13.00	12.80	12.50	13.00	12.75	13.75
13	33.00	Nom.	98.75	98.75	12.50	12.30	12.50	13.00	12.75	13.75
14	33.00	Nom.	99.00	99.00	12.50	12.30	12.50	13.00	12.75	13.75
15	33.00	Nom.	98.75	98.75	12.50	12.30	12.50	13.00	12.75	13.75
16	33.00	Nom.	99.00	99.00	12.50	12.30	12.50	13.00	12.75	13.75
17	33.00	Nom.	99.125	99.125	12.50	12.30	12.50	13.00	12.75	13.75
18	33.00	Nom.	99.125	99.125	12.50	12.30	12.50	13.00	12.75	13.75
19	33.00	Nom.	99.00	99.00	12.00	11.80	12.50	13.00	12.75	13.75
20	33.00	Nom.	99.00	99.00	12.00	11.80	12.50	13.00	12.75	13.75
21	33.00	Nom.	99.00	99.00	12.00	11.80	12.50	13.00	12.75	13.75
22	33.00	Nom.	98.75	98.75	12.00	11.80	12.50	13.00	12.75	13.75
23	33.00	Nom.	98.875	98.875	12.00	11.80	12.50	13.00	12.75	13.75
24	33.00	Nom.	98.875	98.875	12.00	11.80	12.50	13.00	12.75	13.75
25	33.00	Nom.	98.50	98.50	12.00	11.80	12.50	13.00	12.75	13.75
26	33.00	Nom.	98.75	98.75	12.00	11.80	12.50	13.00	12.75	13.75
27	33.00	Nom.	98.875	98.875	12.00	11.80	12.50	13.00	12.75	13.75
28	33.00	Nom.	98.875	98.875	12.00	11.80	12.50	13.00	12.75	13.75
29	33.00	Nom.	99.75	99.75	13.00	12.80	12.50	13.00	12.75	13.75
30	33.00	Nom.	98.50	98.50	12.00	11.80	12.50	13.00	12.75	13.75
31	33.00	Nom.	98.50	98.50	12.00	11.80	12.50	13.00	12.75	13.75
AV.	33.00	33.60	99.176	99.176	12.523	12.323	12.50	13.00	12.75	13.75
HI.	33.00	34.60	99.75	99.75	13.00	12.80	12.50	13.00	12.75	13.75
LO.	33.00	35.00	98.50	98.50	12.00	11.80	12.50	13.00	12.75	13.75

* When split quotations prevail the daily average price is listed. The highs and lows for the month take into consideration the levels reached at both sides of such ranges.

Copper Brands

Deliverable Against Commodity Exchange, Inc.

Brand or Marks	Producer	Grade	Brand or Marks	Producer	Grade
B. E. R.	American Smelting & Refining Co. (Baltimore, Md.)	Electrolytic	C & H	Calumet & Hecla Consolidated Copper Co.	Lake
P. A.	American Smelting & Refining Co. (Maurer, N. J.)	Electrolytic	C. R.	Copper Range Company	Lake
T	American Smelting & Refining Co. (Tacoma, Wash.)	Electrolytic	Q. M. CO.	Quincy Mining Company	Lake
B. & M.	Anaconda Copper Mining Co.	Electrolytic			
AE	Andes Copper Mining Co.	Electrolytic			
BOLIDEN	Bolidens-Gruvaktiebolag	Electrolytic			
C. C. R.	Canadian Copper Refiners Ltd. (Montreal)	Electrolytic			
C de P Peru	Cerro de Pasco Corporation	Electrolytic			
C. C. C.	Chile Copper Company	Electrolytic			
F E C	Falconbridge Nickel Mines, Ltd.	Electrolytic			
K U E	Kennecott Copper Corp.	Electrolytic			
L. M. C.	Lewin Metals Corporation	Electrolytic			
M U F	Mufulira Copper Mines, Ltd.	Electrolytic			
N A	Norddeutsche Affinerie	Electrolytic			
O R C	Ontario Refining Co., Ltd.	Electrolytic			
A. L. S.	Phelps Dodge Refining Corp. (For Adolph Lewisohn Selling Corp.)	Electrolytic			
L. N. S.	Phelps Dodge Refining Corp.	Electrolytic			
P * D	Phelps Dodge Corporation	Electrolytic			
N. E. C.	Raritan Copper Works	Electrolytic			
R E C	Rhokana Corporation	Electrolytic			
B O R	Rudnicki Bakra i Topionice	Electrolytic			
U M K	Union Miniere du Haut Katanga	Electrolytic			
D R W	United States Metals Refining Co.	Electrolytic			
AMCO	United States Metals Refining Co.	Electrolytic			
OPHC	United States Metals Refining Co.	Electrolytic			
W E K	Zinnwerke Wilhelmsburg G.m.b.H.	Electrolytic			

* Subsidiary, American Metal Climax, Inc.

Lead Brands

Refined At

Federal, Ill., U. S.
Carteret, N. J., U. S.
Monterrey, Mexico
Port Pirie, Australia
Indianapolis, Ind., U. S.

Braubach a/Rhein, Germany

Idaho, U. S.
Orya, Peru
Collinsville, Ill., U. S.

Monterrey, N. L., Mexico
Alton, Ill., U. S.
Oker, Germany
Joplin, Mo., U. S.
Kamioka, Japan
Stolberg, Rhineland, Germany
Federal, Ill., U. S.
Chicago, Ill., U. S.
Hoboken, Belgium
Alton, Ill., U. S.
Omaha, Neb., U. S.
Monsanto, Ill., U. S.
Monteponi, Italy
San Gavino Monreale, Sardinia, Italy
Hammond, Ind., U. S.

Omaha, Neb., U. S.
Overelt, Belgium

Megrine, Tunisia
Penarroya, Sopwith & Cartagena, Spain
Perth Amboy, N. J., U. S.
Genoa, Italy
Alton, Ill., U. S.
Collinsville, Ill., U. S.
Selby, Calif., U. S.
Trail, B. C., Canada
Baelen-Usines, Belgium

American Smelting & Refining Co.
United States Metals Refining Co.
American Smelting & Refining Co.
Broken Hill Associated Smelters
National Lead Co., American Lead Plant

Blei-und Silberhütte Braubach

Bunker Hill Smelter
Cerro de Pasco Copper Corp.
St. Louis Smelting & Refining Co.

Compania Metalurgica Penoles, S.A.
St. Joseph Lead Company
Unterharzer Berg- und Hüttenwerke
Eagle-Picher Mining & Smelting Co.
Mitsui Mining Co.
Stolberger Zinc Aktiengesellschaft für Bergbau und Hüttenbetrieb
American Smelting & Refining Co.
Goldsmith Bros. Smelting & Refining Co.
Societe Generale Metallurgique de Hoboken
St. Joseph Lead Company
International Smelting & Refining Co.
Levin-Mather Co.
Societa di Monteponi
Montevecchio Societa Italiana del Piombo e dello Zinco

Metals Refining Company

American Smelting & Refining Co.
Compagnie des Matalux d'Overelt-Lommel et de Corphalie, S.A.

Ste. Min. & Metall. de Penarroya
Ete Min. & Met. de Penarroya

American Smelting & Refining Co.
Societa di Pertusola
St. Joseph Lead Company
St. Louis Smelting & Refining Co.
American Smelting & Refining Co.
Consolidated Mining & Smelting Co. of Canada, Ltd.
Ste. des Mines et Fonderies de Zinc de la Vieille-Montagne
Anglem
Central European Mines, Limited
American Smelting & Refining Co.
The Tauneh Corporation
United States Smelting, Refining & Mining Company
United States Smelting, Refining & Mining Company
Virginia Lead Smelting Corp., The
Nassau Smelting & Refining Co.
Hudson Smelting & Refining Co.
Bers & Co., Inc.

*Deliverable against: Commodity Exchange, Inc., Lead Contracts without Certificate of Assay.

** Subsidiary of American Metal Climax, Inc.

†Deliverable against Commodity Exchange, Inc., Lead Contracts with Certificate of Assay of one of the Official Assayers of the Exchange.

‡Subsidiary of National Lead Co.

Brand Mark

*ALTON
**A M CO
*ASARCO MONTERREY
*B.H.A.S.
†BLUE ARROW AMERICAN
LEAD CORP.
*Braubach dopp.
raff, Deutschland
*BUNKER "C" HILL
*CERRO PERU
†CHEMICAL
ST. L. S. & R. CO.
**C.M.F. y A.M.
*DOE RUN
*HARZ 99.985, HARZ 99.9
*EAGLE-PICHER
*E.M.K.
*Eichweiler raffine
*FEDERAL
†G B
*H.E.R. Escut
*HERCULANEUM
*ILR
†MONSANTO
*Monteponi
*Montevecchio
†M R CO METALS REFINING
CO.
*OMAHA & GRANT
*Overelt extra-raffine
O.V.-L.L.-Dur.
*Penarroya
*Penarroya

*PERTH AMBOY
*Pertusola
*ST. JOE
†ST. L. S. & R. CO.
*SELBY
*TADANAC
*Three Stars
Vieille-Montagne Bar
*TRECA
*TSUMCO
*Tsumco
*USS CO
*U S S CO ELECTRO
†VIRGINIA
Nassau Blue
Hudson
Schuylkill

United States Duties on Principal Ore and Metal Imports

(Including Revisions in Effect June 30, 1957, Under Geneva Agreements)

(Quantities Are in Pounds Unless Otherwise Stated; n.s.p.f. Stands for "Not Specially Provided For.")

COPPER

NOTE — The excise tax of 4c a pound on copper (which was reduced to 2c a pound by the Geneva Trade Agreement) was suspended in April, 1947, until March 31, 1949, and on expiration it was further suspended until June 30, 1950. The tax was reimposed on July 1, 1950. It was suspended again on May 22, 1951, retroactive to April 1, 1951, and until February 15, 1953, and again until June 30, 1954. Suspension further extended to June 30, 1955, and again until June 30, 1958. If import tax is restored, the 1956 Geneva Agreement provides for 5% reductions effective on June 30 of 1956, 1957 and 1958, provided the price is above 24c; if the price is below 24c the 2c tax would prevail.

Copper ore and concentrates, usable as flux, etc.	
copper content	1.70c lb.
Copper ore and concentrates, product of Cuba,	free
copper content	free
Copper ore and concentrates, product of Philippines, copper content	0.17c lb.
Copper ore and concentrates, copper content	1.70c lb.
Regulus, black, or coarse copper, and cement	
copper, copper content	1.70c lb.
Unrefined black, blister, and converter copper in pigs or converter bars, copper content	1.70c lb.
Refined copper in ingots, plates or bars, copper content	1.70c lb.
Copper rolls, rods or sheets	1 1/4c lb.
(plus 1.70c lb. ††)	
Copper seamless tubes and tubing	3 1/4c lb.
(plus 1.70c lb. ††)	
Copper plain wire	12 1/4% (plus 1.70c lb. ††)
Copper brazed tubes	4.50c lb.
(plus 1.70c lb. ††)	
Old and scrap copper, fit only for remanufacture: and scale and clippings, copper content	1.70c lb.

†† Copper content.

BRASS

Brass rods, sheets, plates, bars, strips, Muntz or yellow metal sheets, sheathing, bolts, piston rods, shafting and bronze rods, tubes and sheets	2c lb.
Brass tubes and tubing, seamless	2c lb.
Brass tubes, brazed, angles and channels	6c lb.
Brass and bronze wire	12 1/2 %

LEAD

NOTE — Import duties on lead-bearing ores, flux dust, and mattes of all kinds, lead bullion or base bullion, lead in pigs and bars, lead dross, reclaimed lead and antimonial lead were suspended February 12, 1952, and reimposed on June 26, 1952. Lead scrap duty was reimposed July 1, 1952.

Lead-bearing ores and mattes, n. s. p. f.	
lead content	3/4c lb.
Bullion or base bullion, lead content	1 1/16c lb.
Pigs and bars, lead content	1 1/16c lb.
Reclaimed, scrap, dross, lead content	1 1/16c lb.
Babbitt metal and solder, lead content	1 1/16c lb.
Pipe, sheets, shot, glaziers' lead, and wire	1 5/16c lb.
Type metal and antimonial lead,	
lead content	1 1/16c lb.
White lead	1.05c lb.
Litharge	1 1/4c lb.
Red lead	15/16c lb.
Orange mineral	1c lb.

ZINC

NOTE — Import duties on zinc-bearing ores, and on zinc in blocks, pigs and slabs were suspended February 12, 1952, and reimposed on July 24, 1952. Tax on old zinc and dross and skimmings reimposed July 1, 1953.

Zinc-bearing ores, except pyrites containing not more than 3% zinc, zinc content	6/10c lb.
Zinc contained in zinc-bearing ores, n. e. s., not recoverable, zinc content	6/10c lb.
Zinc, old and worn out, fit only for remanufacture	3/4c lb.
Dross and skimmings	3/4c lb.
Zinc in blocks, pigs or slabs	7/10c lb.
Zinc in sheets	1c lb.
Zinc sheets, plated with nickel or other base metal, or solutions	1 1/4c lb.

Zinc dust	7/10c lb
Zinc die-casting alloys	12 1/2 %
Zinc oxide and leaded zinc oxides containing not more than 25% lead, dry	3/5c lb.
ground in or mixed with oil or water	1c lb.

MISCELLANEOUS METALS AND ORES

Aluminum, metal and alloys, crude, except alloys elsewhere provided for†	1.25c lb.
Aluminum scrap	free
Aluminum plates, sheets, bars, rods, circles, squares, etc.†	2.50c lb.
Antimony ore, antimony content	free
Antimony metal and regulus	2c lb.
Antimony needle or liquidated	1/4c lb.
Antimony oxide	1c lb.
Antimony sulphides	1/2c lb. & 12 1/2 %
Arsenic, metallic†	2.50c lb.
Arsenious acid or white arsenic	free
Bauxite, crude*	free
Bauxite, refined**	1/4c lb.
Bismuth	1 1/2 %
Bismuth salts and compounds	35 %
Beryllium metal†	21 %
Beryllium ore	free
Cadmium	3 3/4c lb.
Cadmium flue dust, cadmium content	free
Chrome ore or chromite	free
Chrome or chromium metal†	10 1/2 %
Cobalt metal	free
Cobalt ore and concentrates, cobalt content	free
Magnesium, metallic†	50 %
Magnesium powder, sheets, wire†	17c lb. & 8 1/2 %
Magnesium alloys	20c lb. & 10 %
Magnesium scrap	free
Manganese ores, containing over 10% manganese, manganese content	1/4c lb., except Cuba, free
Molybdenum ore or concentrates, molybdenum content†	30c lb.
Nickel ore, matte and oxide	free
Nickel and alloys, nickel chief value, n. s. p. f., in pigs, ingots, shot, cubes, grains, cathodes, or similar forms	1 1/4c lb.
Nickel, bars, rods, plates, sheets, castings, strips, wire or electrodes	12 1/2 %
Nickel scrap	free
Nickel tubes, tubing	6 1/4 %
(if cold rolled, drawn or worked — 2 1/2 % extra)	
Platinum, grain, nuggets, sponge and scrap, oz. troy	free
Platinum in ingots, bars, sheets, or plates, not less than 1/8 in. thick, oz. troy	free
Platinum, ores, platinum content, oz. troy	free
Quicksilver or mercury	25c lb.
Selenium and salts	free
Tantalum	12 1/2 %
Tin ore, cassiterite, and black oxide of tin, tin content	free
Tin in bars, blocks, pigs, grain, granulated, and scrap, and alloys, chief value tin, n. s. p. f.	free
Tungsten ore or concentrates, tungsten content	50c lb.

*Grade bauxite import duty suspended through July 15, 1940. **Under Public Law 25 alumina imported for use in aluminum production is free for entries from July 17, 1956 through July 15, 1960. †Tariff reduced 5% on June 30, 1958, under Geneva Agreement which expires on June 30, 1959.

Copper Statistics Reported by Copper Institute

Combined Totals in U. S. A. and Outside U. S. A.

	Crude Production		(In tons of 2,000 pounds)			Deliveries to Refined Stock	Stock Increases or Decreases		
	Primary	Secondary	Refined Production	Customers	End of Period		Blister	Refined	Total
1957									
Total	2,897,719	123,270	3,035,588	2,853,307	458,340	—14,599	+103,920	+89,321	
1958									
Total	2,707,926	138,696	2,805,622	2,916,588	258,874	+41,000	—199,466	—158,466	
1959									
January	257,682	12,377	270,995	248,574	284,545	— 936	+22,001	+21,065	
February	244,405	12,737	264,018	243,741	304,303	— 6,876	+19,578	+12,882	
March	270,248	17,019	285,425	270,768	319,241	+ 1,842	+14,938	+16,780	
April	265,937	15,653	278,959	270,262	329,871	+ 2,631	+10,630	+13,261	
May	279,629	11,695	283,024	266,378	350,343	+ 8,300	+20,472	+28,772	
June	277,855	12,347	284,420	294,232	345,429	+ 5,782	— 4,914	— 868	
July	256,729	9,198	274,752	231,138	374,519	+16,563	—15,035	+ 1,584	
August	232,944	4,552	223,452	237,944	378,649	+11,543	—11,519	+ 24	
September	186,837	7,652	187,294	232,282	354,926	+ 7,195	—23,723	—16,528	
				(Oct. 1)	356,614				
October	184,409	10,955	181,707	210,945	330,438	+13,657	—26,176	—12,519	
November	192,353	10,631	186,496	229,281	311,049	+16,388	—19,387	— 3,001	
December	211,222	9,767	203,614	238,179	293,006	+17,375	—18,043	— 668	
Total	2,860,101	134,583	2,926,657	2,973,110	293,006	+68,027	+28,774	+96,801	
In U. S. A.									
1957									
Total	1,116,380	112,060	1,616,964	1,277,946	181,024	.....	+60,379	.....
1958									
Total	1,008,170	131,294	1,446,540	1,179,416	80,722	.....	—12,874	.....
1959									
January	95,542	11,284	137,361	114,425	80,780	.....	+ 58	.....
February	88,432	11,425	142,235	120,134	85,523	.....	+ 4,743	.....
March	101,410	16,120	140,928	124,220	85,952	.....	— 2,751	.....
April	98,376	14,287	137,490	135,233	74,323	.....	— 8,629	.....
May	104,236	9,933	135,031	135,135	86,132	.....	+11,809	.....
June	99,419	11,352	138,403	150,117	85,674	.....	— 458	.....
July	81,662	8,323	134,020	108,127	103,432	.....	+17,558	.....
August	51,327	3,994	83,677	90,123	94,109	.....	— 9,323	.....
September	19,503	6,578	44,468	92,501	79,826	.....	—14,283	.....
			(Oct. 1)	81,514					
October	20,931	9,861	44,218	68,648	78,308	.....	— 3,206	.....
November	18,351	9,710	37,299	83,625	74,462	.....	— 3,666	.....
December	23,250	8,595	46,302	90,123	64,763	.....	— 9,879	.....
Total	802,439	121,462	1,221,612	1,312,412	64,763	.....	—17,647	.....
Outside U. S. A.*									
1957									
Total	1,783,119	11,210	1,418,624	1,575,361	277,316	.....	+43,541	.....
1958									
Total	1,699,756	7,402	1,359,082	1,737,172	178,152	.....	—99,164	.....
1959									
January	162,140	1,093	133,634	134,149	203,765	.....	+21,943	.....
February	155,973	1,312	121,783	123,607	218,780	.....	+15,015	.....
March	168,838	899	144,497	146,548	236,232	.....	+17,502	.....
April	161,561	1,366	141,469	135,029	255,548	.....	+19,259	.....
May	175,393	1,762	147,993	131,243	264,211	.....	+ 8,663	.....
June	178,436	995	146,017	144,115	259,755	.....	— 4,456	.....
July	175,067	857	140,732	123,011	286,122	.....	+26,367	.....
August	181,617	558	142,276	147,821	284,540	.....	— 2,196	.....
September	167,354	1,047	142,646	139,781	275,100	.....	— 9,440	.....
October	163,478	1,093	137,489	142,297	252,130	.....	—22,970	.....
November	173,902	921	149,197	145,655	236,407	.....	—15,723	.....
December	187,972	1,172	157,312	148,056	228,243	.....	— 8,164	.....
Total	2,057,662	13,121	1,705,045	1,660,698	228,243	.....	+46,421	.....

* Excluding Russia, Yugoslavia, Norway, Sweden, Japan and Australia.

Electrolytic Copper Producers' Price, Del. Valley Monthly Average Prices (Cents Per Pound)

	1956	1957	1958	1959
Jan.	43.00	36.00	25.69	29.00
Feb.	44.03	33.318	25.00	29.972
Mar.	46.00	32.00	25.00	31.14
Apr.	46.00	32.00	25.00	31.50
May	46.00	32.00	25.00	31.50
June	46.00	30.955	25.36	31.50
July	41.56	29.25	26.125	30.587
Aug.	40.00	28.639	26.50	30.00
Sept.	40.00	27.031	26.50	30.571
Oct.	39.308	27.00	27.548	30.75
Nov.	36.00	27.00	29.00	32.375
Dec.	36.00	27.00	29.00	33.00
Aver.	41.992	30.183	26.31	30.991

Electrolytic Copper Custom Smelters' Price, Del. Valley Monthly Average Prices (Cents Per Pound)

	1956	1957	1958	1959
Jan.	50.22	34.87	24.577	29.429
Feb.	52.07	32.273	23.557	30.361
Mar.	53.11	30.952	23.326	33.21
Apr.	48.88	31.24	23.66	32.84
May	44.221	30.163	23.865	32.00
June	40.00	29.60	25.52	31.477
July	38.14	28.39	29.231	29.52
Aug.	39.32	27.862	26.52	30.056
Sept.	39.00	25.948	26.355	33.00
Oct.	37.192	25.722	28.577	33.00
Nov.	35.95	25.435	29.829	Nom.
Dec.	35.45	25.26	28.846	35.00
Aver.	42.797	28.93	25.905	29.122

Lake Copper Producers' Price Delivered Monthly Average Prices (Cents Per Pound)

	1956	1957	1958	1959
Jan.	43.00	36.00	25.69	29.00
Feb.	43.783	33.182	25.00	30.00
Mar.	46.00	32.00	25.00	31.14
Apr.	46.00	32.00	25.00	31.50
May	46.00	32.00	25.00	31.50
June	46.00	30.955	25.00	31.50
July	41.68	29.25	25.75	30.587
Aug.	40.00	28.611	26.50	30.00
Sept.				

Fabricators' Copper Statistics

(In tons of 2,000 pounds)

Fabricators' Stocks of Refined Cop.	Unfilled Purchases of Refined Cop. by Fab. from Producers	Fabricators' Working Stocks	Unfilled Sales by Fabricators to Customers	Actual Copper Consumed by Fabricators	Excess Fabricators' Stocks Over Orders Bkd.
1953					
Total	380,881	25,022	309,664	170,917	1,375,869
1954					
Total	360,526	58,125	304,619	136,581	1,231,840
1955					
Total	437,187	117,601	336,217	183,834	99,223
Dec.					+ 34,737
Total					1,418,241
1956					
Mar.	429,410	104,551	338,454	164,623	106,170
Apr.	429,708	98,638	335,921	164,410	117,041
May	434,852	92,943	336,697	170,476	115,355
June	426,905	82,919	340,743	153,042	110,527
July	432,918	85,728	341,684	144,410	77,991
Aug.	429,827	82,768	344,315	144,375	110,323
Sept.	425,168	80,436	344,530	144,538	108,927
Oct.	420,130	80,774	341,869	138,420	119,161
Nov.	428,520	68,249	345,832	128,719	98,725
Dec.	430,171	75,627	347,465	138,631	83,067
Total					1,279,086
1957					
Jan.	445,514	57,917	348,426	123,756	94,642
Feb.	452,673	52,342	351,035	128,330	86,625
Mar.	448,125	71,693	346,875	141,387	83,694
Apr.	450,442	76,602	347,607	145,623	79,813
May	441,001	78,194	346,404	138,190	88,447
June	433,526	72,383	330,301	145,162	109,011
July	431,796	77,362	326,263	153,529	79,353
Aug.	421,931	78,194	323,687	150,436	96,717
Sept.	416,887	71,025	319,281	145,390	105,474
Oct.	399,113	91,019	315,929	156,692	138,017
Nov.	419,914	88,580	328,238	157,799	110,487
Dec.	447,123	90,401	326,438	177,869	92,573
Total					1,165,364
1958					
Jan.	457,387	101,182	337,761	172,698	108,556
Feb.	459,046	123,321	390,522	183,113	116,565
Mar.	449,441	130,785	334,904	211,547	133,259
Apr.	463,582	125,250	337,282	204,618	120,680
May	474,657	133,694	338,835	210,424	124,060
June	492,072	111,229	343,585	191,875	133,702
July	518,699	110,367	357,474	193,338	81,500
Aug.	487,259	97,786	359,049	191,476	121,563
Sept.	462,880	111,675	360,760	206,254	116,880
Oct.	431,612	119,806	347,136	211,359	100,302
Nov.	412,401	127,162	338,856	224,442	102,837
Total					23,735

Scrap Copper Receipts by Custom Smelters and Refineries in United States*

(In Short Tons)

	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959
Jan.	15,763	6,640	4,528	6,486	9,859	11,047	14,322	17,506	16,024	14,511
Feb.	12,500	5,153	3,633	10,337	8,490	15,198	14,497	11,145	9,518	14,712
Mar.	13,538	7,912	5,243	19,991	9,738	12,198	15,927	13,934	11,783	19,522
Apr.	12,304	8,553	6,214	16,583	9,004	13,162	17,233	14,288	15,279	17,525
May	8,749	8,458	8,033	10,857	8,687	15,133	20,805	12,397	13,989	13,960
June	20,523	8,628	4,425	10,945	13,309	14,765	14,758	11,949	13,945	15,065
July	10,040	6,642	5,188	9,063	10,260	9,988	12,632	8,926	12,185	11,144
Aug.	10,452	6,113	5,003	7,137	10,100	12,197	12,510	11,645	11,896	7,468
Sept.	4,903	3,561	4,667	9,042	10,641	15,037	9,518	9,756	9,268	10,070
Oct.	9,159	3,336	4,602	10,065	11,662	12,897	15,570	13,151	23,088	12,860
Nov.	9,237	3,179	4,724	7,815	10,879	9,865	11,369	11,146	16,425	11,773
Dec.	7,178	4,538	6,208	11,476	14,876	13,180	14,613	11,237	10,796	10,894
Total	142,067	71,812	62,470	129,798	127,449	154,714	173,748	147,080	164,196	159,507

* As compiled by Copper Institute.

Brass and Bronze Ingot Monthly Shipments

(NET TONS)

	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959
Jan.	19,452	18,874	28,416	28,315	23,423	20,661	25,201	27,736	25,681	20,468	22,046
Feb.	15,026	18,487	27,168	24,211	25,429	19,920	25,349	24,949	20,769	17,413	23,746
Mar.	14,550	22,494	31,997	23,890	28,256	23,653	29,713	28,310	21,948	18,825	26,109
Apr.	10,591	22,118	30,473	22,547	25,044	24,746	27,641	25,808	23,507	18,009	26,115
May	11,114	23,643	33,267	21,740	21,660	22,269	23,708	23,437	22,037	17,191	23,967
June	9,694	25,093	33,817	21,274	20,818	22,348	23,141	18,842	18,888	17,962	22,922
July	10,220	21,609	32,016	18,947	19,321	17,074	18,513	17,364	16,695	16,658	20,346
Aug.	14,194	29,689	25,285	21,807	20,156	21,654	27,013	23,812	19,654	17,882	21,741
Sept.	16,208	28,811	22,285	22,770	21,463	22,464	26,349	20,929	19,670	20,540	22,685
Oct.	19,096	32,940	9,194	9,911	22,920	24,040	25,228	23,045	22,800	23,225	23,067
Nov.	18,488	31,748	23,544	23,441	21,806	23,061	25,102	21,818	19,767	20,758	22,283
Dec.	17,950	28,575	20,987	22,983	20,541	21,274	21,448	18,046	16,875	18,676	19,535
Total	175,643	303,563	332,378	277,736	271,251	263,233	298,406	274,096	248,297	227,607	274,562
Aver.	14,637	25,297	27,615	23,145	22,694	21,936	24,867	22,841	20,681	18,133	22,864

Mine Production of Copper in United States

	(U. S. Bureau of Mines) (In short tons)			Total
	Eastern	Missouri	Western	
1958	79,681	2,130	1,018,496	1,100,307
1957	6,962	67	81,080	88,109
Dec.	6,962	127	61,342	87,039
Ttl.	79,369	1,800	995,753	1,076,922
1958	5,801	155	62,296	68,252
July	4,188	132	56,672	61,222
Aug.	5,570	127	61,342	87,039
Sept.	5,312	114	77,561	82,987
Oct.	7,002	60	85,075	91,518
Nov.	6,617	60	87,379	94,056
Dec.	6,614	70	88,070	94,514
Ttl.	76,849	1,250	902,021	980,304
1959	5,590	126	90,386	97,102
Feb.	5,883	130	81,889	87,902
Mar.	6,513	140	91,499	98,152
Apr.	7,240	150	93,295	100,685
May	7,007	110	94,277	101,394
June	7,245	124	86,861	94,230
July	6,763	124	80,488	87,375
Aug.	6,813	116	47,474	54,403
Sept.	6,655	123	19,159	25,937
Oct.	7,092	152	22,669	29,913
Nov.	3,226	140	22,529	25,895

Average Custom Smelters' Scrap Buying Prices

	(Cents per pound for carload lots del. consumers' works)			
	No. 1 Copper Scrap	No. 2 Copper Scrap	Light Copper Scrap	Refinery Brass
1958	24.80	23.30	21.05	22.30
Oct.	25.597	24.097	21.847	23.097
Nov.	24.356	22.856	20.606	21.856
Dec.	21.788	20.282	18.035	18.047
1959	25.29	23.79	21.54	22.79
Feb.	26.42	24.92	22.67	24.11
Mar.	28.79	27.29	25.04	26.79
Apr.	28.04	26.54	24.29	26.04
May	27.81	26.31	24.06	25.81
June	26.80	25.30	23.05	24.80
July	25.14	23.64	21.39	23.14
Aug.	25.762	24.262	22.012	23.762
Sept.	26.369	24.869	22.304	24.369
Oct.	30.00	26.208	23.958	24.528
Nov.	29.50	25.993	23.743	24.239
Dec.	27.321	25.377	23.102	24.774

*Of dry content for material having a dry copper content in excess of 60%.

Brass Ingot Makers' Scrap Buying Prices

	(Average Prices)			
	(Cents per pound del. refinery for 60,000 lbs. of each grade)			
	No. 1 Copper Scrap	No. 2 Copper Scrap	No. 1 Compensation	Heavy Yellow Brass
1958	25.597	24.097	20.182	14.125
Nov.	25.597	24.097	19.038	13.038
Dec.	24.356	22.856	19.038	13.038
Aver.	21.777	20.277	18.653	13.024
1959	25.29	23.79	19.70	13.982
Feb.	26.42	24.92	21.08	15.08
Mar.	28.79	27.29	22.85	16.85
Apr.	28.04	26.54	21.69	15.70
May	27.81	26.31	21.17	15.17
June	26.80	25.30	21.159	15.307
July	25.14	23.64	20.13	14.47
Aug.	25.762	24.262	21.286	14.81
Sept.	26.369	24.869	22.304	16.50
Oct.	27.595	25.405	22.19	16.048
Nov.	29.00	26.208	22.75	16.326
Dec.	28.50	25.993	22.50	16.00
Av.	27.120	25.377	21.567	15.52

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Lead Statistics Reported by American Bureau of Metal Statistics

Lead Refineries in U. S. A. and Outside U. S. A.

(Recoverable Lead Content in Tons of 2,000 Pounds)

Combined U. S. A. and Outside U. S. A.

REFINED PRODUCTION				DELIVERIES			STOCKS		
	Antimonial		Lead		Antimonial		Lead		Antimonial
	Pig	Content	Total	Pig	Content	Total	Pig	Content	Total
1958									
Total ..	1,485,282	106,383	1,591,665	1,307,390	102,697	1,410,087	.....	.....	.....
1959									
Feb. ..	114,528	8,944	123,472	90,915	9,094	100,009	347,455	20,824	368,279
Mar. ..	123,549	8,747	132,296	118,050	9,403	127,453	362,493	20,168	382,661
Apr. ..	127,995	10,398	138,393	146,409	10,345	156,754	334,178	20,221	354,399
May ..	130,046	10,216	140,262	144,988	8,566	153,554	310,042	21,871	331,913
June ..	130,142	10,960	141,102	146,505	12,894	159,399	285,489	19,938	305,427
July ..	113,394	8,721	122,115	97,008	7,879	104,887	300,674	20,780	321,454
Aug. ..	105,433	7,094	112,527	114,715	11,517	126,232	290,832	16,357	307,189
Sept. ..	98,966	4,751	103,717	101,415	5,154	106,569	288,383	15,954	304,337
Oct. ..	101,159	8,583	109,742	112,940	8,808	121,748	276,602	15,729	292,331
Nov. ..	110,295	9,330	119,625	117,420	8,885	126,305	269,477	16,174	285,651
U. S. A.									
1958									
Total ..	473,208	46,985	520,193	589,528	49,893	639,421	.....	.....	.....
1959									
Feb. ..	35,084	4,145	39,229	40,881	4,073	44,954	254,229	12,961	267,190
Mar. ..	35,140	3,868	39,008	49,742	4,279	54,021	248,166	12,744	260,910
Apr. ..	35,072	5,167	40,239	60,312	5,072	65,384	234,187	13,578	247,765
May ..	34,483	4,359	38,842	78,398	4,598	82,996	209,558	13,950	223,508
June ..	31,786	5,296	37,082	75,563	7,122	82,685	177,603	12,424	190,027
July ..	30,098	2,646	32,744	31,991	2,153	34,144	187,526	13,082	200,608
Aug. ..	23,404	2,091	25,495	55,094	7,397	62,491	174,959	7,979	182,938
Sept. ..	14,699	88	14,787	37,310	543	37,853	163,467	7,727	171,194
Oct. ..	18,096	697	18,793	35,110	2,290	37,400	167,969	8,150	176,119
Nov. ..	17,785	854	18,639	42,000	2,038	44,038	158,009	7,602	165,611
Outside U. S. A.									
1958									
Total ..	1,012,074	59,398	1,071,472	717,862	52,804	710,666	.....	.....	.....
1959									
Feb. ..	79,444	4,799	84,243	50,034	5,021	55,055	93,226	7,863	101,089
Mar. ..	88,409	4,879	93,288	68,308	5,124	73,432	114,327	7,424	121,751
Apr. ..	92,923	5,231	98,154	86,097	5,273	91,370	99,991	6,643	106,634
May ..	95,563	5,857	101,420	66,590	3,968	70,558	100,484	7,921	108,405
June ..	98,356	5,664	104,020	70,942	5,772	76,714	107,886	7,514	115,400
July ..	83,296	6,075	89,391	65,017	5,726	70,743	113,148	7,698	120,846
Aug. ..	82,029	5,003	87,032	59,621	4,120	63,741	115,873	8,378	120,846
Sept. ..	84,267	4,663	88,930	64,105	4,611	68,716	124,916	8,227	133,143
Oct. ..	83,063	7,886	90,949	77,830	6,518	84,348	108,633	7,579	116,212
Nov. ..	92,510	8,476	100,986	75,420	6,847	82,267	111,468	8,572	120,040

Summary of Lead Statistics for United States

Recoverable Lead Content In Tons of 2,000 Pounds	Raw Material at Smelter	Stocks (end of period)			Smelter Receipts				
		Base Bullion	At Refinery and Process	Refined Pig and Antimonial		U. S. A.	Origin Outside U. S. A.	Scrap	Total
1958									
December ..	68,197	4,489	28,955	252,466	354,107	25,544	18,921	4,090	43,555
Total ..	.....	.....	.....	.....	.....	297,687	191,415	29,080	518,182
1959									
January ..	69,015	4,243	31,577	257,296	362,131	24,931	19,185	3,167	47,283
February ..	58,921	2,919	35,062	267,190	364,092	22,934	8,435	1,772	33,141
March ..	65,478	4,283	33,815	260,910	364,486	22,258	21,368	1,426	45,052
April ..	61,779	4,424	31,596	247,765	345,564	22,868	11,344	1,214	35,426
May ..	52,115	3,370	32,693	223,508	311,686	22,072	5,330	2,008	29,410
June ..	55,472	7,454	27,020	190,027	279,973	24,610	12,690	2,444	39,744
July ..	51,091	7,009	31,461	200,608	290,169	20,029	11,799	2,065	33,893
August ..	49,262	9,637	24,994	182,938	266,831	20,958	2,703	1,428	25,089
September ..	61,420	9,809	29,012	171,194	271,235	13,725	11,875	753	26,153
October ..	66,942	7,285	24,758	176,119	275,194	15,837	4,959	1,049	21,845
November ..	70,376	3,617	27,335	165,611	266,939	13,956	5,599	649	20,204
1958									
December ..	39,972	39,504	4,307	43,811	31,869	3,737	3,737	3,737	35,606
Total ..	512,323	473,208	46,985	520,193	589,528	49,893	639,421	639,421	639,421
1959									
January ..	45,938	40,110	3,365	43,475	48,311	4,492	4,492	4,492	52,803
February ..	40,655	35,084	4,145	39,229	40,881	4,073	4,073	4,073	44,954
March ..	38,138	35,140	3,868	39,008	49,742	4,279	4,279	4,279	54,021
April ..	38,614	35,072	5,167	40,239	60,312	5,072	5,072	5,072	65,384
May ..	38,722	34,483	4,359	38,842	78,398	4,598	4,598	4,598	82,996
June ..	35,807	31,786	5,296	37,082	75,563	7,122	7,122	7,122	82,685
July ..	37,328	30,098	2,646	32,744	31,991	2,153	2,153	2,153	34,144
August ..	26,698	23,404	2,091	25,495	55,094	7,397	7,397	7,397	62,491
September ..	13,905	14,699	88	14,787	37,310	543	543	543	37,853
October ..	16,315	18,096	697	18,793	35,110	2,290	2,290	2,290	37,400
November ..	16,770	17,785	854	18,639	42,000	2,038	2,038	2,038	44,038

United States Lead Statistics of Primary Refineries

(American Bureau of Metal Statistics)
(In tons of 2,000 lbs.)

	Stock At Beginning	Production Primary & Secondary	Total Supply	Stock At End	Domestic Shipments
1954	81,152	551,618	632,770	92,719	475,551
1955	28,855	547,153	639,872	31,089	531,339
1956	.....	613,293	644,382	.....	529,484
1957	.....	604,353	645,534	.....	463,060
1958	.....	.....	.....	.....	.....
April	128,754	40,984	169,738	143,136	22,172
May	143,136	47,487	190,623	155,121	30,021
June	155,121	44,636	199,757	163,504	32,078
July	163,504	38,827	202,331	164,860	31,948
August	164,860	39,520	204,380	169,302	34,254
September	169,302	43,269	212,571	170,666	41,657
October	170,666	45,467	216,133	169,435	46,647
November	169,435	40,485	209,920	179,321	30,591
December	179,321	44,042	223,363	198,538	24,852
Total	.....	522,956	614,554	.....	380,359
1959	.....	.....	.....	.....	.....
January	198,508	43,652	242,160	208,874	33,035
February	208,874	39,498	248,372	214,946	30,685
March	214,946	39,238	254,184	210,524	40,980
April	210,524	40,606	251,130	197,823	52,469
May	197,823	39,101	236,924	171,577	65,207
June	171,577	37,459	209,036	133,235	75,465
July	133,235	32,882	166,117	142,694	22,380
August	142,694	25,589	168,283	124,259	43,850
September	124,259	14,801	139,060	117,296	21,795
October	117,296	18,892	136,188	115,418	20,552
November	115,418	18,796	134,214	114,303	19,869
December	114,303	30,160	144,463	119,993	24,516
Total	.....	380,674	579,182	.....	450,983

In instances where the figures are not in balance it is due to shipments to other than domestic consumers.

Industrial Classification of Domestic Lead Shipments

	(In tons of 2,000 lbs.)							
	Cable	Amm.	Foil	Batt'y	Brass Making	Sun-dries	Jobbers	Unclassified
1955	72,418	27,599	2,622	88,461	3,960	52,994	13,034	270,251
Total	80,360	24,501	1,436	70,614	3,158	56,851	13,213	274,716
1957	.....	.....	.....	.....	.....	.....	.....	.....
June	3,726	2,250	75	3,762	666	5,071	1,087	20,620
July	5,249	1,650	105	5,332	566	5,310	1,110	19,260
Aug.	5,406	2,250	220	6,165	650	6,246	1,403	27,066
Sept.	4,880	2,700	295	6,722	850	5,782	891	29,739
Oct.	3,671	3,300	205	5,973	881	4,203	847	21,367
Nov.	2,950	2,500	85	3,126	493	3,800	706	18,533
Dec.	2,499	1,350	36	2,820	270	2,607	529	13,997
Total	58,444	25,452	1,691	64,761	7,420	53,284	11,127	240,881
1958	.....	.....	.....	.....	.....	.....	.....	.....
Jan.	2,938	550	70	4,775	521	5,173	801	18,594
Feb.	2,899	1,750	70	5,124	90	1,643	888	11,368
Mar.	3,133	1,200	35	4,711	681	3,149	908	15,068
April	3,207	900	70	3,138	580	2,831	533	10,913
May	3,216	1,850	35	4,671	866	3,071	1,027	15,285
June	3,463	1,950	35	2,767	480	4,217	1,716	17,450
July	3,169	1,250	275	3,936	515	4,157	1,052	17,594
Aug.	3,481	2,415	70	4,992	400	6,399	100	16,397
Sept.	4,132	2,290	320	5,775	848	6,771	1,747	19,774
Oct.	3,243	2,450	...	4,548	285	6,210	1,041	28,270
Nov.	3,890	2,150	50	6,527	360	4,887	822	12,105
Dec.	2,267	2,100	50	6,216	215	2,578	652	10,774
Total	38,838	20,855	1,080	57,180	5,841	51,086	11,882	193,592
1959	.....	.....	.....	.....	.....	.....	.....	.....
Jan.	2,284	2,100	100	5,594	161	3,545	727	18,524
Feb.	2,988	1,225	50	5,254	735	2,706	931	16,796
Mar.	3,156	1,850	105	5,905	378	6,006	2,185	21,395
April	3,686	2,150	35	7,410	691	5,356	1,966	31,355
May	4,054	2,900	35	6,870	475	7,990	2,843	40,040
June	5,272	3,210	70	12,515	180	8,009	3,663	42,546
July	850	295	70	2,570	315	3,166	997	14,117
Aug.	3,268	1,150	205	3,073	410	6,640	1,921	27,183
Sept.	1,003	...	35	3,401	255	2,296	1,484	13,321
Oct.	700	500	35	4,299	228	2,676	1,021	11,093
Nov.	2,630	200	70	3,714	205	2,566	797	9,687
Dec.	2,133	250	70	3,479	475	2,628	738	14,043
Total	32,024	16,530	880	64,084	4,508	53,584	19,273	260,100

Lead Prices at New York

(Common Grade)				
Monthly Average Prices (Cents per pound)				
1956	16.16	16.00	13.00	12.619
Jan.	16.00	16.00	13.00	11.583
Feb.	16.00	16.00	13.00	11.42
Mar.	16.00	16.00	13.00	11.20
Apr.	16.00	16.00	12.00	11.20
May	16.00	15.385	11.712	11.905
June	16.00	14.32	11.24	12.00
July	16.00	14.00	11.00	12.00
Aug.	16.00	14.00	10.85	12.286
Sept.	16.00	14.00	10.89	13.00
Oct.	16.00	13.704	12.673	13.00
Nov.	16.00	13.50	13.00	13.00
Dec.	16.00	13.00	13.00	12.523
Aver.	16.013	14.66	12.114	12.211

Lead Sheet Prices

(To Jobbers, Full Sheets)				
Monthly Average Prices (Cents per pound)				
1956	21.66	21.50	18.50	18.119
Jan.	21.50	21.50	18.50	17.083
Feb.	21.50	21.50	18.50	16.92
Mar.	21.50	21.50	18.50	16.92
Apr.	21.50	21.50	17.50	16.70
May	21.50	20.885	17.212	17.405
June	21.50	19.82	16.74	17.50
July	21.50	19.82	16.50	17.50
Aug.	21.50	19.50	16.35	17.786
Sept.	21.50	19.50	16.39	18.50
Oct.	21.50	19.204	18.173	18.50
Nov.	21.50	19.00	18.50	18.50
Dec.	21.50	18.50	18.50	18.023

Battery Shipments

(In thousands of units)				
1956	2,058	2,638	2,004	2,672
Jan.	2,058	1,961	1,803	1,791
Feb.	1,348	1,254	1,577	1,376
Mar.	1,368	1,178	1,242	1,439
Apr.	1,761	1,605	1,454	1,593
May	1,807	1,878	1,773	2,116
June	2,178	2,469	2,101	2,556
July	2,178	2,856	2,333	2,728
Aug.	2,571	2,856	2,704	2,889
Sept.	2,711	2,688	2,704	2,889
Oct.	3,015	3,042	2,976	3,069
Nov.	2,592	2,359	2,262	2,793
Dec.	2,265	2,015	3,036	....
Total	25,014	25,943	25,265	....

METALS, JANUARY, 1960

Lead Stocks at Primary U. S. Smelters and Refiners

(American Bureau of Metal Statistics)
(In tons of 2,000 lbs.)

In ore and matte and in process at smelters	In base bullion (lead content)					Anti- monial lead	Total Stocks
	At smelters & refineries	In transit to refineries	In process at refineries	Refined pig lead			
1957							
Sept. 1. 84,205	13,029	2,667	22,439	51,080	9,553	182,973	
Oct. 1. 80,662	11,905	3,175	20,351	44,467	10,215	170,775	
Nov. 1. 76,230	14,220	2,538	18,695	47,460	11,581	170,724	
Dec. 1. 65,341	11,646	3,547	21,867	59,755	11,119	173,275	
1958							
Jan. 1. 79,362	11,019	2,779	23,154	79,741	11,857	207,912	
Feb. 1. 79,738	11,510	3,678	24,535	88,517	12,689	220,667	
Mar. 1. 79,588	9,546	3,670	22,834	107,213	12,309	235,250	
Apr. 1. 83,185	10,692	2,187	21,766	116,610	12,144	246,584	
May 1. 86,053	11,838	2,138	20,524	130,668	12,468	263,689	
June 1. 79,482	11,059	2,010	20,188	141,967	13,154	267,860	
July 1. 80,060	9,012	1,570	22,092	150,648	12,856	276,238	
Aug. 1. 83,347	12,438	860	21,615	154,378	10,482	283,379	
Sept. 1. 77,416	14,767	1,176	20,444	158,413	10,889	283,105	
Oct. 1. 72,724	14,797	2,223	18,125	159,662	11,004	278,535	
Nov. 1. 61,819	11,492	1,086	19,041	157,385	12,050	262,873	
Dec. 1. 62,960	11,072	1,565	20,941	167,493	11,828	275,859	
1959							
Jan. 1. 72,378	10,917	1,767	19,746	185,913	12,595	303,316	
Feb. 1. 72,832	10,565	1,889	21,317	197,085	11,789	315,477	
Mar. 1. 62,383	11,707	1,447	21,479	202,835	12,111	311,962	
Apr. 1. 68,433	14,352	350	20,575	198,459	12,065	314,234	
May 1. 64,538	12,373	624	20,507	184,468	13,355	295,865	
June 1. 55,223	12,239	766	20,391	157,981	13,596	260,196	
July 1. 58,451	13,270	943	19,468	120,914	12,321	225,367	
Aug. 1. 53,115	18,379	158	18,021	129,551	13,143	232,367	
Sept. 1. 50,007	17,389	...	15,638	116,344	7,915	207,293	
Oct. 1. 61,910	17,925	...	14,932	109,527	7,769	212,063	
Nov. 1. 69,429	14,800	...	14,919	107,849	7,569	214,566	

Receipts of Lead in Ore and Scrap By U. S. Smelters (a)

(American Bureau of Metal Statistics) (In tons of 2,000 lbs.)

	Receipts of lead in ore			Receipts of lead in scrap	Total receipts etc. (b)
	United States	Foreign	Total		
1953 Total	351,183	155,788	506,971	42,994	549,965
1954 Total	336,291	158,081	494,372	49,864	544,236
1955 Total	341,595	172,966	514,561	42,996	557,557
1956					
Total	368,499	192,318	560,817	55,925	616,792
1957					
September	26,479	13,757	40,236	4,375	44,611
October	29,342	13,782	43,124	4,386	47,510
November	25,809	17,251	43,060	3,258	46,318
December	27,105	26,610	53,715	3,791	57,506
Total	356,409	206,901	563,310	42,537	605,847
1958					
January	25,537	22,097	47,634	3,507	51,141
February	23,789	16,400	40,189	2,184	42,373
March	21,735	20,038	41,773	3,154	44,927
April	25,104	15,821	40,925	1,913	42,838
May	27,427	10,228	37,655	1,867	39,522
June	28,577	13,811	42,388	1,366	43,754
July	22,289	19,692	41,891	1,615	43,596
August	22,984	13,043	36,027	1,252	37,279
September	20,654	14,576	35,230	1,765	36,995
October	18,678	9,093	27,771	3,577	31,348
November	24,024	14,541	38,565	3,933	42,498
December	24,366	18,804	43,170	3,982	47,152
Total	285,164	188,144	473,308	30,115	503,423
1959					
January	24,304	19,449	43,753	3,138	46,891
February	22,253	8,660	30,913	1,747	32,660
March	21,897	21,012	42,909	1,328	44,237
April	22,339	10,998	33,337	1,196	34,533
May	21,645	5,202	26,847	1,930	28,777
June	23,634	12,368	36,002	2,431	38,433
July	19,165	11,695	30,860	2,199	33,059
August	19,971	2,821	22,792	1,009	23,801
September	13,591	3,465	17,056	32	17,088
October	14,740	3,648	18,388	133	18,521

(a) Receipts of lead in ore are computed on the basis of recoverable lead. Owing to the estimational factor in this, which is probably on the low side, and also to the possibility that some lead receipts may escape attention, these monthly totals probably underrun the actual production of pig lead. (b) Inclusive only of scrap smelted in connection with ore, plus some scrap received by primary refiners.

N. Y. Lead Price Changes

(Effective Date)

1951	Apr. 12...14.00	Oct. 2...14.25
1952	June 15...14.00	Apr. 29...18.00
	May 2...17.00	May 12...15.00
	June 23...15.50	June 24...16.00
	July 7...15.00	Oct. 7...14.50
	Aug. 22...18.50	Oct. 29...15.50
	Sept. 3...14.00	Nov. 10...14.20
	Oct. 20...14.25	Dec. 29...16.00
	Nov. 24...14.00	Jan. 13...16.00
	Dec. 22...14.25	Feb. 2...13.50
	Jan. 18...13.00	Mar. 4...12.00
	Feb. 18...12.50	Mar. 10...11.50
	Mar. 9...12.75	Apr. 7...11.00
	Mar. 10...13.00	Mar. 26...12.50
	Mar. 26...13.25	Apr. 24...12.00
	Mar. 29...13.50	May 2...11.00
	Apr. 1...18.75	Dec. 21...12.00

**OPS Ceiling.

Antimonial Lead Stocks at Primary Refineries

(A.B.M.S.)

	(In tons of 2,000 pounds)	End of 1956	1957	1958	1959
Jan.	8,389	10,487	12,689	11,789	
Feb.	9,095	10,220	12,309	12,111	
Mar.	10,289	9,794	12,144	12,065	
Apr.	10,690	9,391	12,468	13,355	
May	10,902	9,799	13,154	13,596	
June	9,452	9,503	12,856	12,321	
July	10,924	8,661	10,482	13,143	
Aug.	10,074	9,553	10,889	7,915	
Sept.	11,181	10,215	11,004	7,769	
Oct.	11,382	11,581	12,050	7,569	
Nov.	11,832	11,119	11,828	7,625	
Dec.	11,746	11,857	12,595	11,991	

Antimonial Lead Production by Primary Refineries

(A.B.M.S.)

	(In tons of 2,000 pounds)	End of 1956	1957	1958	1959
Jan.	5,045	5,113	3,743	3,541	
Feb.	5,888	5,468	3,657	4,415	
Mar.	5,526	5,091	3,527	4,098	
Apr.	5,818	6,183	3,655	5,533	
May	5,405	6,978	4,827	4,618	
June	4,456	4,466	3,992	5,671	
July	3,853	5,372	2,775	2,784	
Aug.	5,343	7,987	5,244	2,185	
Sept.	6,709	7,574	4,761	102	
Oct.	5,378	6,148	5,849	886	
Nov.	6,993	3,791	3,913	1,324	
Dec.	5,766	3,290	4,539	2,656	
Total	66,180	67,541	50,482	37,813	

Lead Imports and Exports By Principal Countries

(A.B.M.S.)

Reported in pigs, bars, etc.; metric tons except where otherwise noted.			
	1959		
	Aug.	Sept.	Oct.
IMPORTS			
U. S. (s.t.)	19,074	16,623	18,762
Belgium	1,338	947	...
Denmark	1,657	2,065	2,679
France	3,853	4,020	5,070
Germany, West	5,552	5,730	...
Italy**	945	...	...
Netherlands	2,372	3,456	3,737
Norway	356	...	...
Sweden	733	1,009	...
Switzerland	1,189	1,391	936
U. K. (l.t.)	9,364	11,829	10,903
India† (l.t.)	711	1,854	...
EXPORTS			
U. S. (s.t.)	1,418	19	39
Canada (s.t.)	4,024	3,895	4,884
Belgium	6,890	...	...
Denmark	3,066	713	1,177
France	26	117	200
Germany, West	1,737	2,650	...
Netherlands	258	755	491
Sweden	3,186	2,329	...
Switzerland	...	2	...
Northern Rhodesia† (l.t.)	1,927	981	769
Australia (l.t.)	9,235	9,721	12,136

* Refined.

** Includes lead alloys.

† British Bureau of Non-Ferrous Metal Statistics.

‡ Includes scrap.

French Lead Imports

(A.B.M.S.)

(In metric tons)			
	1959		
	Sept.	Oct.	Nov.
Ore (gross weight)	5,781	10,152	3,459
Algeria	...	450	...
Morocco	5,781	8,652	2,509
Fr. Eq. Africa	...	1,500	500
Pig lead	4,020	5,070	3,129
Belgium	1,042	1,048	1,084
Germany (W.)	201	...	...
Algeria	6	...	...
Morocco	1,365	2,611	1,340
Tunisia	1,126	1,411	705
Australia	280	...	...
Antimonial lead	31	16	53

U. K. Lead Imports

(British Bureau of Non-Ferrous Metal Statistics)

(In tons of 2,240 lbs.)			
	1959		
	Sept.	Oct.	Nov.
(Gross Weight)			
Lead and lead alloys	11,829	10,903	7,551
Australia	10,022	7,518	3,423
Canada	1,278	2,590	2,379
Yugoslavia	...	400	...
Peru	...	100	100
Other countries	529	695	1,249

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in the
DAILY METAL REPORTER**

U. S. Lead Consumption

(Bureau of Mines — In Short Tons)

Metal Products:	totals	Sept.	Oct.
Ammunition	37,982	4,130	4,202
Bearing metals	19,032	1,956	2,050
Brass and bronze	20,176	2,016	1,981
Cable covering	51,004	5,027	4,854
Calking lead	66,282	6,690	6,546
Casting metals	6,308	593	663
Collapsible tubes	7,421	856	865
Foil	3,094	252	251
Pipes, traps and bends	19,066	1,928	1,976
Sheet lead	23,237	1,954	2,404
Solder	57,065	5,948	5,015
Storage battery grids, posts, etc.	151,955	15,654	17,680
Storage battery oxides	149,563	16,207	17,039
Tin metal	...	55	60
Type metal	21,942	2,042	2,267
Total	635,542	65,308	67,853

Pigments:	9,875	1,029	401
White lead	9,875	1,029	401
Red lead and litharge	68,678	6,738	7,763
Pigment colors	11,532	1,221	1,475
Other*	3,684	370	403
Total	93,769	9,358	9,952

Chemicals:	14,108	15,565	15,565
Tetraethyl lead	135,978	14,108	15,565
Misc. chemicals	3,244	500	476
Total	139,222	14,608	16,041

Miscellaneous uses:	3,345	138	148
Annealing	3,345	138	148
Galvanizing	769	13	21
Lead plating	148	9	4
Weights and ballast	6,057	904	696
Total	10,319	1,064	869

Other uses unclassified	14,022	1,556	1,725
Total reported†	892,874	91,894	96,440
Estimated unreported consumption	20,000	2,000	2,000
Grand total†	912,900	93,900	98,400
Daily average‡	2,601	3,130	3,175

Includes lead content of leaded zinc oxide production.
† Includes lead content of scrap used directly in fabricated products.
‡ Based on number of days in month without adjustment for Sundays and holidays.

U. K. Lead Consumption

(British Bureau of Non-Ferrous Metal Statistics)

(In tons of 2,240 pounds)

	1957	1958	1959
Jan.	29,657	29,607	28,872
Feb.	29,219	27,855	25,968
Mar.	29,144	29,713	26,691
Apr.	27,246	26,230	29,252
May	31,574	28,839	27,280
June	28,607	28,624	30,099
July	27,604	27,201	26,851
Aug.	24,756	21,726	25,358
Sept.	29,519	28,829	30,255
Oct.	32,486	31,356	32,926
Nov.	31,060	28,786	32,579
Dec.	26,530	27,154	...
Total	347,699	335,920	...

American Antimony

Monthly Average Prices

In bulk, f.o.b. Laredo

(Cents per lb. in ton lots)

	1956	1957	1958	1959
Jan.	33.00	33.00	33.00	29.00
Feb.	33.00	33.00	30.818	29.00
Mar.	33.00	33.00	29.00	29.00
Apr.	33.00	33.00	29.00	29.00
May	33.00	33.00	29.00	29.00
June	33.00	33.00	29.00	29.00
July	33.00	33.00	29.00	29.00
Aug.	33.00	33.00	29.00	29.00
Sept.	33.00	33.00	29.00	29.00
Oct.	33.00	33.00	29.00	29.00
Nov.	33.00	33.00	29.00	29.00
Dec.	33.00	33.00	29.00	29.00
Aver.	33.00	33.00	29.485	29.00

Consumers' Lead Stocks, Receipts and Consumption

(Bureau of Mines — In Short Tons)

Stocks Sept. 30, 1959	Net Receipts in Oct.	Consumed in Oct.	Stocks Oct. 31, 1959
102,041	52,316	64,303	90,055
36,918	22,462	23,708	35,672
7,209	2,761	3,410	6,560
1,140	1,441	1,555	1,026
Total	147,308	78,980	*92,976

* Excludes 3,115 tons of lead which went directly from scrap to fabricated products and 349 tons of lead contained in leaded zinc oxide production.

Consumption of Lead by Class of Product

(Bureau of Mines — In Short Tons)

OCTOBER

	Soft lead	Antimonial lead	Lead in alloys	Lead in copper-base scrap	Total
Metal products	36,844	22,957	3,382	1,555	64,738
Pigments	9,577	26	...	...	9,603
Chemicals	16,040	1	...	...	16,041
Miscellaneous	272	597	...	...	869
Unclassified	1,570	127	28	...	1,725
Total	64,303	23,708	3,410	1,555	*92,976

* Excludes 3,115 tons of lead which went directly from scrap to fabricated products and 349 tons of lead contained in leaded zinc oxide production.

Domestic Zinc Statistics

American Zinc Institute

Commencing with January, 1948, all regularly operating U. S. primary and secondary smelters are included in this report. Production from foreign ores also is included.

	Stock Beginning	Production	Domes- tic Drawback	Export & Gov't Ac't	Total	Stock at End	Daily Avg. Prod.	Shipments
1950 Tl.	94,221	910,354	849,246	18,189	128,256	995,691	8,884	2,494
1950 Mo. Avg.		75,863	70,770	1,516	10,688	82,974		
1951 Total	8,884	931,833	836,800	42,067	39,949	918,816	21,901	2,553
1951 Mo. Avg.		77,653	69,733	3,506	3,329	76,568		
1952 Total	21,901	961,430	803,343	56,202	36,626	896,171	87,160	2,627
1952 Mo. Avg.		80,119	66,945	4,633	3,062	74,581		
1953 Total	87,160	971,191	818,850	16,326	42,332	877,508	180,843	2,661
1953 Mo. Avg.		80,933	65,238	1,361	3,528	73,126		
1954 Total	180,843	865,242	787,922	27,929	108,957	924,808	124,277	2,379
1954 Mo. Avg.		72,353	65,660	2,327	9,080	77,067		
1955 Total	40,979	1,031,018	1,007,619	19,497	87,200	1,114,316	40,979	2,825
1955 Mo. Avg.		85,918	83,968	1,625	7,267	92,860		
1956 Total		1,062,954	869,270	9,027	157,014	1,035,311	68,622	2,904
1956 Mo. Avg.		88,850	72,439	752	13,085	86,275		
1957								
November	155,925	79,754	73,437	581	9,148	83,166	152,531	2,658
December	152,531	86,270	62,730	210	9,188	72,128	166,655	2,783
1957 Total	1,067,450	765,132	15,460	179,466	815,567			
1958								
January	166,655	82,343	58,211	641	9,805	68,657	180,346	2,656
February	180,346	68,354	49,072	446	9,993	59,511	189,189	2,441
March	189,189	72,274	48,948	111	8,763	57,822	203,641	2,331
April	203,641	70,214	46,598	159	5,927	52,684	221,171	2,340
May	221,171	71,018	51,390	129	.....	51,519	240,670	2,291
June	240,670	66,967	54,487	171	.....	54,658	252,979	2,232
July	252,979	65,119	60,312	55	.....	60,187	257,911	2,101
August	257,911	62,927	68,718	591	.....	69,309	251,529	2,030
September	251,529	63,705	76,905	213	.....	77,118	238,116	2,124
October	238,116	65,304	93,018	226	.....	93,224	210,176	2,107
November	210,176	65,174	83,394	212	.....	83,606	191,744	2,172
December	191,744	75,503	76,862	148	.....	77,010	190,237	2,432
1958 Total		828,902	767,755	3,102	34,488	805,325	.....	.....

* Inflated by abnormal shipments on consignment of approximately 9,000 tons.

U. S. Consumption of Slab Zinc

Bureau of Mines By Industries (Short Tons)

	Galvan- izers	Die Casters	Brass products	Rolled zinc	Zinc oxide & other	Total
1950 Total	434,094	281,385	136,451	67,779	27,656	947,365
1951 Total	386,373	266,442	141,456	64,000	28,738	887,009
1952 Total	375,563	236,022	155,311	51,508	30,885	849,289
1953 Total	403,162	305,846	177,301	53,784	38,087	977,636
1954 Total	398,599	286,817	107,293	45,979	33,342	876,130
1955 Total	439,694	404,790	144,816	50,363	39,302	1,081,468
1956 Total	421,218	352,451	122,395	45,382	36,251	983,097
1957						
September	28,651	31,051	9,588	2,911	1,590	75,976
October	32,940	35,499	10,952	3,385	1,783	87,898
November	28,025	31,396	10,024	2,843	1,255	76,595
December	24,383	27,927	7,854	2,679	1,427	67,421
Total	355,796	358,543	111,114	39,544	20,486	924,063
1958						
January	26,861	26,348	9,115	3,183	1,664	69,295
February	24,598	22,629	7,279	2,716	1,316	60,347
March	27,171	19,045	6,871	3,138	1,724	59,978
April	27,464	17,829	6,392	3,259	1,295	58,432
May	30,935	18,316	6,597	2,896	2,263	61,907
June	34,377	21,497	6,643	2,961	2,212	67,690
July	30,677	17,387	6,275	2,848	1,920	60,007
August	34,663	20,382	8,358	3,379	1,901	70,033
September	34,048	25,188	9,624	3,458	770	74,122
October	36,513	27,682	11,753	3,845	881	81,919
November	31,658	27,311	10,067	3,276	826	74,302
December	31,746	29,926	10,529	3,681	1,018	78,082
Total	370,441	273,540	92,906	38,690	16,772	737,942
1959						
January	31,729	29,110	11,172	3,874	2,521	79,506
February	31,672	26,448	11,508	3,418	2,864	77,010
March	37,287	29,286	12,889	3,629	3,203	87,394
April	38,541	31,262	12,304	3,715	3,223	90,145
May	38,788	29,169	12,015	3,316	3,305	88,093
June	40,531	36,269	10,764	3,801	3,120	95,985
July	23,700	28,120	7,558	2,509	2,042	65,429
August	13,763	29,803	10,064	3,160	2,161	60,451
September	13,181	31,463	10,842	3,322	2,237	62,545
October	13,582	35,473	10,543	3,272	2,487	66,857

METALS, JANUARY, 1960

Prime Western Zinc Prices (East St. Louis, f.o.b.)

	(Cents per pound)			
	(In tons of 2,240 pounds)			
	1956	1957	1958	1959
Jan.	13.46	13.50	10.00	11.50
Feb.	13.50	13.50	10.00	11.411
Mar.	13.50	13.50	10.00	11.00
Apr.	13.50	13.50	10.00	11.00
May	13.50	11.933	10.00	11.00
June	13.50	10.84	10.00	11.00
July	13.50	10.00	10.00	11.00
Aug.	13.50	10.00	10.00	11.00
Sept.	13.50	10.00	10.00	11.381
Oct.	13.50	10.00	10.865	12.233
Nov.	13.50	10.00	11.386	12.50
Dec.	13.50	10.00	11.50	12.50
Aver.	13.497	11.40	10.313	11.46

High Grade Zinc Prices

	(Delivered)			
	N. Y. Monthly Averages			
	(Cents per pound)			
	1956	1957	1958	1959
Jan.	14.81	14.85	11.35	12.50
Feb.	14.85	14.85	11.35	12.411
Mar.	14.85	14.85	11.35	12.00
Apr.	14.85	14.85	11.084	12.00
May	14.85	13.283	11.00	12.00
June	14.85	12.19	11.00	12.00
July	14.85	11.35	11.00	12.00
Aug.	14.85	11.35	11.00	12.006
Sept.	14.85	11.35	11.00	12.625
Oct.	14.85	11.35	11.865	13.483
Nov.	14.85	11.35	12.386	13.75
Dec.	14.85	11.35	12.50	13.75
Aver.	14.847	12.75	11.407	12.544

U. K. Zinc Consumption

	(British Bureau of Non-Ferrous Metal Statistics)			
	(In Tons of 2,240 Pounds)			
	1957	1958	1959	
Jan.	28,485	27,473	27,849	
Feb.	26,276	24,551	25,676	
Mar.	27,049	26,967	27,243	
Apr.	24,247	24,984	28,006	
May	29,589	24,579	26,167	
June	25,202	25,587	30,221	
July	25,934	23,794	26,318	
Aug.	20,381	19,076	21,566	
Sept.	27,792	26,747	31,270	
Oct.	29,552	29,838	30,386	
Nov.	26,705	26,432	29,221	
Dec.	24,419	26,042	...	
Total	315,631	306,070	...	

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in the
DAILY METAL REPORTER

Mine Production of Zinc in United States
(U. S. Bureau of Mines)

	(In short tons)			Total U.S.*
	Eastern States	Central States	Western States	
1954				
Total	166,487	63,100	234,942	464,539
1955				
Total	163,230	73,630	277,811	514,671
1956				
Total	175,310	61,080	301,253	537,643
1957				
Total	196,877	29,506	290,151	520,128
1958				
Apr.	15,719	1,311	22,375	39,405
May	15,580	1,314	18,940	35,834
June	14,931	1,490	16,650	32,971
July	13,427	—	15,985	29,442
Aug.	15,760	—	13,627	29,387
Sept.	14,857	—	15,279	29,865
Oct.	16,197	—	16,074	32,271
Nov.	15,393	—	16,998	32,391
Dec.	15,064	—	16,939	32,003
Total	181,202	8,450	213,267	402,919
1959				
Jan.	16,319	—	19,117	35,436
Feb.	16,405	—	19,304	35,709
Mar.	17,602	—	18,822	36,424
Apr.	18,521	—	19,149	37,670
May	18,500	—	19,170	37,670
June	17,501	—	18,443	35,944
July	12,697	—	18,686	31,383
Aug.	13,810	140	16,641	30,591
Sept.	13,639	154	14,778	28,571
Oct.	15,368	200	15,030	30,598

*Includes Alaskan output in some months.

Mine Production of Lead in United States
(U. S. Bureau of Mines)

	(In short tons)			Total U.S.*
	Eastern States	Central States	Western States	
1953				
Ttl.	9,970	136,650	188,776	335,412
1954				
Ttl.	8,608	138,940	169,804	317,352
1955				
Ttl.	10,379	145,640	177,409	333,409
1956				
Ttl.	11,395	141,900	195,034	348,329
1957				
Ttl.	9,300	135,800	188,392	333,493
1958				
May	626	11,660	11,939	24,225
June	615	10,662	11,499	22,776
July	454	10,019	10,662	21,135
Aug.	447	8,859	9,512	18,818
Sept.	389	7,734	11,221	19,344
Oct.	517	9,290	11,467	21,274
Nov.	606	10,500	11,823	22,929
Dec.	565	9,600	11,699	21,865
Ttl.	6,816	119,070	140,033	265,920
1959				
Jan.	469	9,748	13,180	23,397
Feb.	501	8,457	12,392	21,578
Mar.	601	7,943	12,585	21,129
Apr.	454	8,103	12,635	21,192
May	413	7,253	12,427	20,093
June	458	8,185	12,727	21,370
July	369	8,190	10,980	19,539
Aug.	353	9,762	11,533	21,648
Sept.	510	9,698	10,165	20,373
Oct.	548	10,012	10,395	20,955

Mine Production of Gold in United States

	(U. S. Bureau of Mines) (In fine ounces)			Total
	Eastern States	Western States	Alaska*	
1955	Ttl. 2,026	1,634,625	247,535	1,884,186
1956	Ttl. 1,998	1,607,930	204,300	1,814,228
1957	Ttl. 2,174	1,556,450	210,000	1,768,624
1958	May 203	124,490	557	125,520
	June 182	122,277	8,484	130,943
	July 38	116,775	29,735	146,528
	Aug. 174	113,281	34,947	148,202
	Sept. 156	128,613	38,960	167,459
	Oct. 186	135,882	42,467	178,535
	Nov. —	—	—	144,757
	Dec. —	—	—	10,373
	1959	—	—	145,077
	Jan. —	—	—	233
	Feb. —	—	—	106
	Mar. —	—	—	135,192
	Apr. —	—	—	106
	May —	—	—	490
	June —	—	—	8,882
	July —	—	—	26,457
	Aug. —	—	—	33,113
	Sept. —	—	—	31,974
	Oct. —	—	—	36,626

* Alaska totals based on mint and smelter receipts.

U. S. Silver Production*
(A.B.M.S.)

	(In thousands of ounces; commercial bars, 0.999 fine, and other refined forms)			Total
	Dom.*	For.	Total	
1954 Total	38,059	39,422	77,481	
1955 Total	33,101	32,780	65,881	
1956 Total	38,157	40,160	78,317	
1957 Total	36,279	34,932	71,211	
1958	April	3,123	3,056	6,179
	May	2,597	2,660	5,257
	June	3,243	3,210	6,453
	July	2,127	2,494	4,621
	August	2,651	3,235	5,886
	September	2,614	3,165	5,779
	October	3,831	2,750	6,581
	November	2,505	3,283	5,788
	December	3,275	3,652	7,236
	Total	35,691	37,572	73,263
1959	January	2,330	4,460	6,790
	February	2,827	2,913	5,740
	March	2,823	4,087	6,910
	April	2,946	3,233	6,179
	May	2,641	3,484	6,125
	June	3,219	3,231	6,450
	July	2,609	3,284	5,893
	August	1,472	1,229	2,701
	September	390	577	967
	October	510	610	1,120

* The separation between silver of foreign and domestic origin on the basis of refined bars and other refined forms is only approximate.

† Includes purchases of crude silver by the U. S. Mint.

Average Silver Prices

	(Cents per fine ounce)			
	1956	1957	1958	1959
Jan.	90.357	91.375	89.449	90.19
Feb.	90.90	91.375	88.625	90.444
Mar.	91.128	91.375	88.625	91.351
Apr.	90.875	91.375	88.625	91.375
May	90.75	91.307	88.625	91.375
June	90.46	90.456	88.625	91.375
July	90.14	90.31	88.625	91.375
Aug.	90.614	90.909	88.625	91.399
Sept.	90.75	90.602	88.673	91.375
Oct.	90.722	90.625	89.966	91.375
Nov.	91.375	90.382	90.125	91.375
Dec.	91.375	89.80	89.932	91.375
Aver.	90.79	90.824	89.043	91.226

Note — The averages are based on the price of refined bullion imported on or after August 31, 1943.

METALS, JANUARY, 1960

U. S. Lead Imports

(A.B.M.S.) (Bureau of the Census)
(In tons of 2,000 lbs.)

	1959		
	Sept.	Oct.	Nov.
Ore, matte, etc. (content)	16,436	6,141	13,088
Canada	3,801	1,378	2,285
Mexico	40	16	...
Honduras	554	264	...
Argentina	...	53	...
Bolivia	1,118	440	397
Colombia	...	210	...
Peru	672	1,234	3,622
U. S. Africa	6,844	405	3,955
Australia	3,387	2,276	2,508
Philippines	11	13	12
Korea	...	25	...
Other countries	9	115	21
Base bullion (content)	25	...	...
Canada	25	...	...
Pigs and bars	16,623	18,762	20,647
Canada	3,208	1,112	1,742
Mexico	5,861	10,647	4,401
Peru	1,884	1,749	2,149
Belgium	1,223	...	...
France	215	...	...
Germany (W.)	165	...	...
Netherlands	50	...	...
Spain	1,120	369	...
Sweden	...	560	...
Yugoslavia	...	2,691	5,174
Australia	3,001	1,922	5,918
Other countries	161	7	703*

Total Imports:

Ore, base bullion, refined	33,084	24,903	33,735
Lead scrap, dross, etc. (cont.)	1,323	362	257
Antimonial lead & typemetal	200	449	1,128
Lead content thereof	164	351	1,081

* From Rhodesia.

U. S. Copper Exports

(A.B.M.S.) (Bureau of the Census)
(In tons of 2,000 lbs.)

	1959		
	Sept.	Oct.	Nov.
Ore, conc. matte & other unref. (cont.)	6	...	231
Refined ingots, bars, etc. [†]	8,965	4,404	2,309
Canada	68	209	202
Mexico	27	...	...
Argentina	198	...	...
Brazil	180	22	...
Belgium	85	55	...
France	416	368	121
Germany (W.)	5,430	1,597	1,229
Italy	677	485	114
Netherlands	336	114	140
Norway	224	...	...
Sweden	112	112	...
Switzerland	112	85	16
U. Kingdom	705	530	174
Yugoslavia	569	569	...
Taiwan	10	...	...
India	67	...	...
Japan	55	24	229
Other countries	4	1	7

Total Exports:

Crude & refined	8,971	4,404	2,540
Pipes and tubes	63	57	57
Plates and sheets	20	13	24
Semifabricated forms	562	530	469
Wire, bare	181	231	114
Building wire and cable [†]	227	183	96
Weatherproof wire [†]	5	2	1
Insulated copper wire n.e.s. [†]	973	998	1,751

[†] Includes exports of refined copper resulting from scrap that was reprocessed on toll for account of the shipper.

[†] Gross weight: n.e.s.—not elsewhere specified.

METALS, JANUARY, 1960

U. S. Zinc Imports

(A.B.M.S.) (Bureau of the Census)
(In tons of 2,000 lbs.)

	1959		
	Sept.	Oct.	Nov.
Zinc Ore (content)	32,409	38,934	37,847
Canada	14,674	11,360	10,864
Mexico	10,682	17,577	14,358
Cuba	...	48	...
Honduras	53	68	...
Bolivia	113	33	618
Colombia	...	42	...
Peru	6,303	5,813	8,472
Spain	...	3,002	...
U. S. Africa	27	3,697	...
Australia	475	291	378
Philippines	...	1	2
Other countries	82	46	111
Zinc blocks, pigs, etc.	13,273	16,839	11,045
Canada	6,444	9,436	8,224
Mexico	1,374	112	...
Peru	1,024	227	850
Austria	...	220	...
Belgium	1,653	112	...
Italy	20	1,260	422
United Kingdom	85	...	...
Yugoslavia	717	...	...
Belgian Congo	1,116	2,020	461
Rhodesia & Nyasaland	...	2,027	457
Australia	840	1,645	411

Total Imports:

Zinc ore, blocks, pigs	45,682	55,773	48,892
Dross and skim.	44	114	66
Old and worn out	29	...	57

U. S. Copper Scrap Exports

(A.B.M.S.) (Bureau of the Census)
(In tons of 2,000 lbs.)

	1959		
	Sept.	Oct.	Nov.
Copper scrap, unalloyed [†] (new and old)	773	419	1,278
Canada	41	15	51
Germany (W.)	472	262	526
Italy	...	66	...
India	180	142	11
Japan	80	...	402
Other countries	...	...	222
Copper-base scrap, alloyed [†] (new and old)	1,941	1,136	1,178
Canada	...	...	4
Mexico	5	...	...
France	20	11	...
Germany (W.)	260	165	341
Italy	121	39	22
Netherlands	11	...	...
Switzerland	84	94	...
India	102	119	...
Japan	1,019	94	716
Hong Kong	309	614	45
Other countries	10	...	50

* Ash, brass mill, clippings, dross, flue dust, residues, scale, skimmings, wire scrap.

[†] Copper-base alloys, including brass and bronze—Ashes, clippings for remanufacture, cupro-nickel scrap, cupro-nickel trimmings, nickel silver scrap, phosphor bronze, phosphor copper, skimmings, turnings, round.

Comparative Metal Prices

	OPA	1959
Copper, domestic	Avg. 1939	Avg. 1946
Electro., Del. Val.	11.20	14.375
Lead (N. Y.)	5.05	8.25
P. W. Zinc (E. St.)	...	12.00
Louis, f.o.b.	5.05	5.05
New York, del.	...	13.50
Tin Spot Straits, N. Y.	...	100.25
Aluminum ingot	99 1/4%+	20.00
Antimony (R.M.M.)	...	15.00
brand f.o.b.	...	28.10
Laredo	12.36	14.50
Zinc oxide	...	29.00

* Producers' prices.

U. S. Copper Imports

(A.B.M.S.) (Bureau of the Census)

	1959		
	Sept.	Oct.	Nov.
Ore, matte & regulus (cont.)	10,660	6,674	3,381
Canada	76	24	24
Mexico	43	...	...
Cuba	1,077	2,281	...
Argentina	...	5	106
Bolivia	...	286	...
Chile	2,453	1,055	985
Peru	1,495	1,483	670
Philippines	4,280	...	1
U. S. Africa	1,192	1,540	1,540
Australia	44	...	42
Other countries	...	...	13
Blister copper (content)	25,019	17,791	20,417
Chile	22,657	17,791	17,639
Peru	594	...	...
U. S. Africa	1,667	...	2,774
Other countries	101	...	4

	1959		
	Sept.	Oct.	Nov.
Crude & refined	75,963	44,298	67,511
Old and scrap (content)	474	508	1,006
Composition metal (content)	27	23	210
Brass scrap & old (cu. cont.)	265	141	258

U. S. Zinc Exports

(A.B.M.S.) (Bureau of the Census)

	1959		
	Sept.	Oct.	Nov.
Slabs, blocks, etc.	3,024	1,354	2,846
Canada	1	...	...
Mexico	242	...	39
Cuba	...	55	...
Argentina	...	43	...
Brazil	68	...	19
Chile	110	387	...
Colombia	...	150	...
Germany (W.)	56	...	...
Netherlands	112	...	...
Sweden	...	560	1,679
United Kingdom	644	196	784
Other countries	...	6	282*
Total Exports:	...	...	...
Ore, conc. slabs, blocks	3,024	1,354	2,846
Scrap, ashes, dross and skimmings	2,413	1,219	853
Battery shells and parts, un-assembled	...	25	13
Rolled in sheets, plates and strips & die castings	262	268	300
Zinc & zinc alloys in crude and semifabricated forms	...	26	137
Zinc oxide	177	76	311

* Includes 280 tons to New Zealand.

World Production of Copper (American Bureau of Metal Statistics)

(In Tons of 2,000 Pounds)

	United States	Canada	Mexico (crude)	Chile	Peru	Fed. Rep. of Germany	Norway	United Kingdom	Yugo- savia	India	Japan	Turkey	Au- stralia	Northern Rhodesia	Union of South Africa
	(a)	(b)	(c)	(d)	(d)	(e)	(f)	(g-h)	(e)	(f-h)	(e)	(f)	(e)	(e)	(d)
1955	1,036,702	326,599	61,583	447,288	35,478	286,805	14,876	138,271	31,151	8,432	124,908	26,313	41,935	350,302	47,176
Total	1,133,134	356,251	69,918	506,251	35,005	279,461	16,457	127,365	32,390	8,827	139,062	27,101	55,711	435,186	47,914
1957	1,115,483	360,745	42,905	46,141	255,710	17,285	121,799	37,186	9,298	143,654	27,101	55,633	499,418	47,828	
1958	71,092	32,418	5,954	34,811	3,405	23,128	1,674	7,414	3,102	769	10,617	1,810	6,819	44,447	4,018
July	64,444	31,131	5,995	40,495	3,780	24,418	1,610	9,091	3,245	801	10,762	1,136	6,139	44,010	3,324
Aug.	67,917	50,867	6,340	45,211	3,646	26,409	1,885	5,451	2,838	786	11,053	6,220	42,000	4,974	
Sept.	79,541	27,546	6,294	40,913	3,677	24,649	1,749	12,027	2,870	792	12,583	6,220	17,291	4,726	
Oct.	92,214	22,572	5,380	47,230	2,950	27,635	1,744	11,225	3,616	809	13,310	6,220	4,749		
Nov.	96,369	20,368	5,040	46,310	5,923	24,932	1,584	8,542	5,462	774	11,764	6,220	25,612	4,249	
Dec.	91,641	19,023	5,066	46,284	5,196	25,569	1,587	9,042	2,929	832	15,054	6,220	45,935	4,406	
Total	1,881,170	346,816	68,386	462,064	42,750	295,312	19,529	106,134	37,116	9,062	136,612	24,676	72,361	426,513	53,090
1959	95,542	24,669	5,342	44,579	3,115	25,945	1,724	7,356	3,685	679	17,385	2,469	5,349	48,699	4,600
Jan.	88,432	28,016	4,810	43,589	1,627	24,289	1,599	9,211	3,521	557	11,388	1,614	5,930	44,420	4,339
Feb.	101,410	32,427	4,771	44,554	1,601	26,959	1,694	8,654	3,536	810	10,746	2,034	4,573	51,630	4,611
Mar.	98,376	32,130	5,201	42,715	4,250	26,859	1,870	11,259	3,593	763	17,938	2,330	7,419	48,150	4,528
April	104,236	32,622	5,275	46,083	3,770	25,358	1,771	7,693	3,503	764	18,516	2,480	6,408	53,067	4,676
May	99,419	36,979	5,847	46,901	3,867	24,656	1,748	10,909	3,231	776	18,621	2,362	8,133	53,895	4,766
June	81,662	36,067	5,755	45,508	3,676	25,890	1,639	7,108	3,369	781	18,957	1,846	5,346	48,806	4,541
July	51,327	35,045	5,326	50,993	2,533	24,716	1,677	6,610	1,810	774	18,805	2,378	5,798	50,285	4,357
Sept.	19,503	35,740	4,125	44,439	8,782	25,357	1,985	10,438	779	18,837	6,220	7,111	48,753	4,357	
Oct.	20,931	35,980	4,066	3,061	27,233	....	8,951	804	18,898	....	49,519	....	49,519	....
Nov.	18,325	....	4,886	2,904	....	....	....	....	....	....	49,232	....	....	....	....

(a) Reported by Comex Institute. Crude, "recoverable contents of mine production or smelter production on shipments and custom intake." Does not include intake of scrap nor of imported ore except that received from Cuba and Philippines. (b) Blister copper plus recoverable copper in concentrates, matte, etc., exported. (c) Crude copper, i.e., copper content of blister or converted copper as originally produced in the several countries, although some of it may be refined at home; e.g., in Rhodesia. (d) Blister and/or refined. (e) Refined. There are quantities of scrap included in the electrolytic production in addition to that reported, tonnage of which is not obtainable. (f) Smelter production. (g) Refinery production from imported blister only. (h) British Bureau of Non-Ferrous Metal Statistics. * Refined.

World Production of Refined Lead (American Bureau of Metal Statistics)

(In Tons of 2,000 Pounds)

	United States	Canada	Mexico	Peru	Belgium	France	Fed. Rep. of Germany	Italy	Spain	Yugo- savia	Japan	Au- stralia	French Morocco	Tunisia	Rho- desia	Total
	(a)	(b)	(c)	(d)	(d)	(e)	(f)	(g)	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(d)
1955	547,153	148,811	221,138	67,303	91,241	73,251	162,508	46,806	67,509	83,347	40,912	254,558	28,870	28,620	17,976	1,893,125
1956	613,293	147,865	213,524	61,917	111,479	73,251	178,713	42,780	64,824	83,507	51,019	256,300	30,993	26,623	17,024	1,984,344
1957	604,533	142,935	218,266	55,971	....	94,509	195,136	42,336	61,332	85,313	59,670	261,035	34,442	27,069	12,364	2,041,530
1958	44,636	12,706	17,846	6,255	8,264	7,977	15,194	3,677	6,403	4,461	22,979	2,906	3,127	1,232	164,278	
July	38,827	7,175	18,315	6,880	8,548	8,319	11,229	4,581	6,327	6,872	3,567	21,563	2,767	568	1,232	147,624
Aug.	39,250	6,940	17,991	6,100	7,495	15	13,760	4,584	6,913	5,414	19,942	2,584	2,756	1,176	140,501	
Sept.	43,269	10,908	16,256	5,192	7,849	8,202	15,700	4,367	5,692	6,942	3,587	22,632	2,184	2,369	1,120	158,285
Oct.	45,467	12,598	11,968	5,074	7,940	9,308	17,130	4,639	7,121	9,242	3,523	22,482	3,550	2,410	1,176	164,818
Nov.	40,486	10,645	17,067	6,448	9,495	9,068	17,785	4,825	6,914	11,155	3,555	20,148	2,625	2,519	1,120	165,406
Dec.	44,042	11,076	20,902	5,544	10,342	10,351	18,370	5,101	7,069	11,212	3,769	21,492	4,002	2,779	1,120	179,309
Total	575,612	130,886	246,443	80,999	119,192	111,337	223,973	60,860	77,490	92,903	52,915	271,654	42,266	32,359	16,492	1,955,753
1959	43,662	14,073	19,031	4,951	10,761	6,694	18,658	4,636	6,215	4,082	6,086	2,470	2,575	1,068	1,344	169,256
Jan.	39,498	12,740	15,472	6,262	9,460	5,812	17,869	4,437	6,020	8,596	6,474	22,037	2,319	1,765	1,344	157,928
Feb.	39,238	13,704	16,305	5,824	8,447	6,733	17,553	3,168	6,196	8,153	6,889	20,144	1,905	2,429	1,344	156,914
Mar.	40,606	13,655	16,621	4,438	8,038	5,541	17,141	4,942	6,491	6,876	6,615	23,919	2,726	2,155	1,344	162,611
April	39,101	13,357	16,934	6,606	8,797	7,363	17,728	3,614	7,435	8,369	6,137	23,499	2,050	1,784	1,344	165,602
May	37,459	12,997	20,000	6,540	9,125	6,976	18,128	2,453	6,510	7,854	6,349	25,151	1,552	926	1,344	164,815
June	32,882	8,699	17,099	6,401	8,734	6,065	16,381	4,384	6,074	2,221	5,303	19,125	2,859	1,749	1,344	139,291
July	25,589	7,357	19,086	4,267	7,547	6,581	15,256	3,354	6,049	8,645	5,344	21,168	862	2,863	1,344	139,291
Aug.	14,801	9,775	14,320	4,354	7,217	6,164	17,773	4,502	4,728	....	5,322	22,786	3,567	2,352	1,344	139,291
Sept.	18,892	....	17,986	6,093	7,107	6,004	17,250	4,494	....	....	5,326	....	3,618	2,046	1,344	139,291
Oct.	18,796	....	18,223	6,199	....	....	....	6,663	....	....	....	....	....	....	1,344	139,291
Nov.	....	....	....	....	....	....	....	6,663	....	....	....	....	....	....	....	139,291

(a) Production credited to Australia includes lead refined in England from Australian base bullion.

(American Bureau of Metal Statistics)

(In Tons of 2,000 Pounds)

	United States	Can.	Mexico	Peru	Belgium	France	Fed. Rep. of Germany	Great Britain	Italy	Nether- lands	Norway	Spain	Yugo- savia	Japan	Au- stralia	Rho- desia	Total
	(a)	(b)	(b-c)	(d)	(d)	(e)	(f)	(g)	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(b)	(d)
1955	1,031,018	257,008	61,879	18,943	233,623	123,623	197,024	90,917	77,761	49,724	26,244	15,175	122,965	113,221	31,248	2,534,457	
1956	1,062,954	255,601	62,136	10,428	251,906	124,105	204,961	90,784	80,407	32,123	53,170	25,224	15,434	153,821	117,445	32,396	2,630,383
1957	1,574,500	247,356	62,354	35,772	259,701	148,455	202,627	85,348	81,179	32,786	52,787	24,279	30,256	152,145	123,587	33,040	2,691,699
1958	71,018	21,456	5,476	2,753	19,857	13,903	17,164	5,958	5,617	2,693	4,826	2,028	2,647	11,679	10,541	2,800	211,529
Jan.	66,967	20,354	5,016	2,429	20,094	14,243	15,663	7,202	7,731	2,221	3,307	2,854	14,040	10,988	9,617	2,548	199,495
Feb.	79,918	22,135	5,439	2,363	20,215	14,230	17,325	7,797	6,901	2,991	4,917	2,369	3,014	13,217	10,759	2,800	221,316
Mar.	62,297	21,152	5,216	2,822	18,308	14,253	16,204	6,689	5,991	2,533	3,793	2,255	2,820	12,420	11,075	2,716	216,378
Apr.	63,705	20,581	5,028	2,640	17,961	12,232	15,635	6,887	5,991	2,533	3,793	2,255	2,820	12,420	11,075	2,716	216,378
May	65,304	21,125	5,108	2,545	21,181	13,902	16,633	6,595	7,790	2,823	4,798	2,273	2,701	16,171	11,137	2,744	226,057
June	75,544	21,250	4,776	2,524	21,004	14,120	16,185	8,271	7,164	2,899	4,759						

U. K. Stocks of Zinc

(British Bureau of Non-Ferrous Metal Statistics)

(In tons of 2,240 lbs.)

Virgin Zinc Zinc Conc.

At start	1958	1959	1958	1959
of:	1958	1959	1958	1959
Jan.	44,926	34,166	79,349	56,371
Feb.	43,308	34,805	82,125	58,518
Mar.	46,662	36,850	87,721	57,897
Apr.	46,608	38,457	84,631	52,151
May	47,251	38,643	80,964	47,936
June	50,539	37,713	74,470	41,954
July	49,613	38,297	71,553	45,640
Aug.	48,497	37,427	70,105	43,948
Sept.	45,590	40,358	63,909	42,385
Oct.	45,784	40,995	57,376	39,233
Nov.	39,341	35,994	53,371	38,948
Dec.	35,396	35,460	58,022	47,131

U. K. Zinc Imports

(British Bureau of Non-Ferrous Metal Statistics)

(In tons of 2,240 lbs.)

1959

Sept. Oct. Nov.

(Gross Weight)	1959	1958	1957
Zinc ore and concentrates	4,230	26,535	14,547
Zinc conc.*	5,433	5,561	...
Australia	2,461	5,642	...
Peru	1,119	9	...
Burma	607	...	...
Turkey	1,246	...	...
Zinc and zinc alloys:			
(Gross Wt.)	17,095	12,599	14,707
Rhodesia-			
Nyasaland	225	225	250
Australia	1,452	...	852
Canada	5,842	6,079	3,652
Belgium	1,455	1,838	2,450
Germany (W.)	...	574	
Netherlands	550	171	371
Soviet Union	300	1,556	2,109
United States	86	109	609
Belgian Congo	2,000	295	2,185
Other countries	5,185	2,326	1,655

* British Bureau of Non-Ferrous Metal Statistics. The estimated zinc content is not the content of the gross weight as officially reported for any comparable period.

† Not available.

U. K. Copper Exports

(British Bureau of Non-Ferrous Metal Statistics)

(In tons of 2,240 lbs.)

1959

Sept. Oct. Nov.

(Gross Weight)	1959	1958	1957
Copper unwrought			
—ingots, blocks, slabs, bars, etc.	10,359	5,787	5,808
Plates, sheets, rods, etc.	1,507	1,542	2,825
Wire (including uninsulated electric wire)	248	340	281
Tubes	787	1,443	1,427
Other copper, worked (including pipe fittings)	134	96	163
Total	13,035	9,208	10,504

Copper Consumption in United Kingdom

(British Bureau of Non-Ferrous Metal Statistics)

(In tons of 2,240 pounds)

	Unalloyed	Alloyed*	Total	Virgin	Scrap
1956 Total	388,167	251,312	639,479	500,794	138,685
1957 Total	407,326	234,158	641,484	507,493	133,991
1958					
July	36,743	17,091	53,564	42,373	11,191
August	28,416	13,756	42,181	33,073	9,108
September	42,813	18,596	61,408	52,018	9,390
October	43,402	21,788	65,190	53,937	11,253
November	40,987	19,232	60,219	47,932	12,287
December	37,580	19,118	56,698	45,968	10,730
Total	442,977	225,001	667,978	534,619	133,359

* Includes copper sulphate effective October, 1954.

U. K. Virgin Copper Stocks

(In long tons)

(British Bureau of Non-Ferrous Metal Statistics)

(Statistics)

At start of:	1957	1958	1959
Jan.	59,614	91,477	64,184
Feb.	59,203	82,483	65,941
Mar.	62,120	89,147	65,875
Apr.	61,779	94,330	72,946
May	71,101	88,582	72,318
June	61,991	88,913	78,505
July	64,121	81,851	80,477
Aug.	81,146	84,756	81,986
Sept.	98,595	89,899	89,483
Oct.	100,815	85,092	77,803
Nov.	90,877	74,696	64,602
Dec.	81,657	69,023	60,936

Zinc Imports and Exports By Principal Countries

(A.B.M.S.)

Reported in pigs, bars, etc.; metric tons except where otherwise noted.

	1959	Aug.	Sept.	Oct.
IMPORTS				
U. S. (s.t.)	9,116	13,273	16,839	
Canada (s.t.)	31	...	...
Belgium	40	10	...	
Denmark	874	730	768	
France	1,352	710	728	
Germany, W.	12,306	12,085	...	
Italy	703	...	...
Netherlands	549	509	1,123	
Sweden	1,793	3,646	...	
Switzerland	903	1,777	1,269	
U. K. (l.t.)	12,584	17,095	12,599	
India† (l.t.)	3,358	1,618	...	
EXPORTS				
U. S. (s.t.)	214	3,024	1,354	
Canada (s.t.)	11,546	12,519	13,505	
Belgium	7,872	11,069	...	
Denmark	15	...	120	
France	477	890	689	
Germany, W.	1,003	685	...	
Italy	771	...	...
Netherlands	2,175	1,720	2,199	
Norway	2,488	...	...
Switzerland	548	260	216	
U. K.† (l.t.)	443	474	486	
Northern Rhodesia† (l.t.)	3,620	1,683	3,047	
Australia (l.t.)	2,763	3,835	2,933	
Belgian Congo	4,935	...	...

* Includes scrap.

† Includes manufactures.

‡ British Bureau of Non-Ferrous Metal Statistics.

United Kingdom Tin Statistics

(British Bureau of Non-Ferrous Metal Statistics)

Tin Content of Tin in Ore	Tin Metal		
	Imports	Production*	Consumption
1957 Total	39,272	1,028	20,365
1958	...	...	7,862
October	1,913	91	1,419
November	1,971	96	1,770
December	2,757	90	2,299
1958 Total	27,419	1,090	18,195
1959	...	...	20,413
January	1,337	113	1,096
February	1,817	115	1,300
March	1,645	100	1,595
April	1,743	103	1,798
May	1,493	92	1,575
June	1,323	129	920
July	2,971	112	2,043
August	1,878	58	1,704
September	2,808	115	2,132
October	2,004	...	1,851
			24
			1,911
			1,986
			10,383

* As reported by International Tin Study Group. Production of Tin Metal includes production from imported scrap and residues refined on toll. Stocks exclude strategic stock but include official warehouse stocks.

Canada's Copper Output

(Dominion Bureau of Statistics)

(Refined Copper)				
	(In Tons)			
	1956	1957	1958	1959
Jan.	26,653	25,469	32,868	24,664
Feb.	26,229	21,861	28,668	28,016
Mar.	26,750	27,663	29,239	32,427
Apr.	26,617	27,398	30,635	32,130
May	27,626	29,086	32,471	32,622
June	27,122	24,093	32,418	36,979
July	27,250	27,195	31,131	36,067
Aug.	29,219	26,943	30,867	35,045
Sept.	27,950	24,633	27,546	35,740
Oct.	29,696	30,312	22,572	....
Nov.	27,346	27,331	20,368	....
Dec.	28,716	31,604	19,033	....
Year	331,174	323,588	346,816	....

Canada's Copper Exports

(Dominion Bureau of Statistics)

(Ingots, bars, slabs and billets)				
	(In Tons)			
	1956	1957	1958	1959
Jan.	15,981	20,582	26,883	10,620
Feb.	11,041	16,272	16,816	10,304
Mar.	12,276	14,270	18,662	11,025
Apr.	14,476	16,417	23,261	17,079
May	12,851	19,048	19,358	21,739
June	10,985	10,826	20,831	21,310
July	13,599	18,621	21,703	13,650
Aug.	14,710	21,980	15,881	15,155
Sept.	17,268	14,314	15,373	28,684
Oct.	13,896	13,110	20,341	....
Nov.	19,130	16,622	14,391	....
Dec.	18,630	16,282	11,138	....
Year	174,843	198,794	224,638	....

Canada's Lead Output

(Dominion Bureau of Statistics)

(Recoverable Lead)*				
	(In Tons)			
	1956	1957	1958	1959
Jan.	16,002	14,032	17,117	17,118
Feb.	14,344	15,170	14,908	15,923
Mar.	16,857	16,940	15,421	17,389
Apr.	11,573	14,275	15,644	16,237
May	15,446	14,591	15,131	16,813
June	18,145	16,431	15,645	14,968
July	15,841	14,377	14,076	15,111
Aug.	16,104	14,679	12,260	14,104
Sept.	15,760	15,869	15,401	12,420
Oct.	16,725	14,151	14,564	13,958
Nov.	14,865	15,879	16,680	....
Dec.	16,056	15,296	18,248	....
Year	188,971	171,890	185,095	....

* New base bullion from Canadian ores plus recoverable lead in ores or concentrates shipped for export.

Canada's Lead Exports

(Dominion Bureau of Statistics)

	(In Pigs)			
	(In Tons)			
	1956	1957	1958	1959
Jan.	4,888	8,946	4,752	5,034
Feb.	3,856	6,633	1,553	6,377
Mar.	4,007	7,044	9,497	11,831
Apr.	7,636	7,314	7,450	7,836
May	7,214	9,676	7,764	12,230
June	6,632	7,210	4,036	15,610
July	9,696	4,682	12,629	3,478
Aug.	4,713	6,416	7,232	4,023
Sept.	9,908	8,467	5,125	3,895
Oct.	9,072	7,761	10,320	4,885
Nov.	9,227	6,175	10,641	....
Dec.	2,734	4,217	11,352	....
Year	79,633	84,541	92,351	....

Canada's Silver Exports

(Dominion Bureau of Statistics)

	(In ores and concentrates)		
	(Fine Ounces)		
	1957	1958	1959
Jan.	253,940	634,715	185,367
Feb.	380,463	208,149	329,742
Mar.	521,849	350,827	425,973
Apr.	431,646	284,971	989,593
May	523,228	376,082	564,017
June	468,559	438,253	871,570
July	844,545	529,770	728,598
Aug.	811,530	279,511	688,042
Sept.	861,857	583,570	763,017
Oct.	432,000	323,475	767,939
Nov.	263,273	217,892	....
Dec.	186,569	871,573	....
Year	5,979,459	5,098,788	....

Canada's Zinc Output

(Dominion Bureau of Statistics)

	(Refined Zinc)			
	(In Tons)			
	1956	1957	1958	1959
Jan.	21,896	20,340	21,801	21,456
Feb.	20,356	19,808	19,743	19,709
Mar.	22,010	21,941	22,314	22,135
Apr.	21,339	20,504	20,989	21,512
May	21,790	20,564	21,269	21,147
June	20,780	19,928	20,353	21,250
July	21,691	20,061	20,873	21,055
Aug.	21,354	20,305	21,152	21,588
Sept.	20,691	20,247	20,530	20,744
Oct.	21,412	20,892	21,125	21,744
Nov.	20,470	20,933	20,273	....
Dec.	22,012	21,823	21,705	....
Year	255,607	247,351	252,157	....

Canada's Silver Output

(Dominion Bureau of Statistics)

	(In Ounces)			
	1957	1958	1959	
Jan.	2,158,631	2,529,583	3,094,440	
Feb.	2,051,679	2,284,655	2,264,903	
Mar.	2,346,316	2,448,698	2,782,307	
Apr.	2,225,638	2,558,958	2,691,503	
May	2,111,185	2,650,665	2,499,149	
June	2,208,584	2,527,632	2,676,937	
July	2,388,390	2,385,687	2,867,957	
Aug.	2,592,468	2,884,154	2,519,033	
Sept.	2,382,121	2,856,304	2,446,846	
Oct.	2,817,358	2,390,027	3,072,219	
Nov.	2,566,519	2,643,790	....
Dec.	2,537,984	2,917,528	....
Year	28,361,873	31,087,681	....

Canada's Zinc Exports

(Dominion Bureau of Statistics)

	(Slabs in Tons)			
	1956	1957	1958	1959
Jan.	15,550	19,304	17,349	13,565
Feb.	11,757	16,618	8,376	12,675
Mar.	8,822	14,923	19,636	14,617
Apr.	14,317	17,131	16,346	12,789
May	11,357	16,680	15,121	11,049
June	15,296	16,157	7,776	20,298
July	15,499	12,912	27,394	23,122
Aug.	13,070	20,520	15,906	18,464
Sept.	19,732	17,671	8,670	14,367
Oct.	20,792	16,735	22,810	12,518
Nov.	21,411	17,225	17,978	....
Dec.	16,125	16,131	18,344	....
Year	183,728	202,007	195,707	....

Canada's Nickel Output

(Dominion Bureau of Statistics)

	(In Tons)			
	1956	1957	1958	1959
Jan.	14,985	16,609	16,710	8,047
Feb.	14,997	15,027	15,896	12,616
Mar.	15,504	16,733	15,853	14,922
Apr.	14,431	15,347	15,163	15,493
May	15,203	16,225	15,231	16,622
June	14,492	15,447	14,603	16,599
July	15,125	15,878	12,851	16,190
Aug.	14,852	16,756	12,597	16,784
Sept.	14,530	15,604	11,786	16,205
Oct.	15,762	15,628	3,682	....
Nov.	15,062	14,587	3,178	....
Dec.	14,824	15,096	3,298	....
Year	178,767	188,962	140,842	....

Canadian Copper Exports

(Dominion Bureau of Statistics)

	(In tons of 2,000 lbs.)		
	Sept.	Oct.	Nov.
Ore, matte, regulus, etc.			
(content)	2,629	1,699	1,992
United States	453	4	389
Belgium	139		
Norway	1,852	1,214	1,198
United Kingdom	185	88	128
Japan	393	277	
Ingots, bars, billets, anodes	28,684	21,348	27,649
United States	15,661	11,018	16,622
Belgium	280	280	280
France	1,037	140	840
Germany (W.)	784	1,148	390
Greece	224		
Italy	504	224	84
Netherlands	812	112	784
Portugal	56		
United Kingdom	8,556	7,220	7,978
India	1,049	924	669
Other countries	1	2	2
Total Exports:			
Crude & refined	31,313	23,047	29,641
Old and scrap	852	563	1,117
Rods, strips, sheet & tubing	1,861	1,321	1,889

Canadian Zinc Exports

(Dominion Bureau of Statistics)

	(In tons of 2,000 lbs.)		
	Sept.	Oct.	Nov.
Ore (zinc content)	14,367	12,518	16,576
United States	10,458	10,194	12,878
Belgium	3,571		
Germany (W.)	338		
United Kingdom		3,698	
Japan	2,324		
Slab zinc	12,519	13,505	17,902
United States	6,960	7,741	9,097
United Kingdom	5,497	5,578	8,743
Korea	62	186	62
Total Exports:			
Ore and slabs	26,886	26,023	34,478
Zinc scrap, dross, ashes	777	394	438
United States	47	165	47
Belgium	730	100	25
Netherlands		103	314
Japan		26	52

French Copper Imports

(A.B.M.S.)

	(In metric tons)		
	Sept.	Oct.	Nov.
Crude copper for refining (blister, black and cement)	974	813	...
United Kingdom	161	...	...
Belgian Congo	813	813	...
Refined	6,166	12,955	7,610
United States	718	3,451	333
Canada	813	762	762
Chile . . . . .	...	750	...
Belgium	2,488	4,777	3,170
Germany (W.)	86	1	69
Norway	127	127	152
Sweden . . . . .	...	...	38
Belgian Congo	832	2,579	775
Rhodesia-Nyasaland	1,102	508	2,311

Canadian Lead Exports

(Dominion Bureau of Statistics)

	(In tons of 2,000 lbs.)		
	Sept.	Oct.	Nov.
Ore (lead content)	6,081	1,760	2,381
United States	2,925	1,760	2,381
Belgium	3,156		
Refined lead	3,895	4,884	6,785
United States	3,524	1,381	1,821
United Kingdom	280	3,488	4,964
Korea	49		
Other countries	42	15	...
Total Exports:			
Ore and refined	9,976	6,644	9,166
Pipe and tubing			2
Lead scrap	367	384	115

Copper Imports and Exports By Principal Countries

(A.B.M.S.)

Reported in ingots, slabs, etc.; metric tons except where otherwise noted.

1959

	Aug.	Sept.	Oct.
IMPORTS			
U. S. (blast, s.t.)	18,837	25,019	17,791
(ore, etc., s.t.)	6,301	10,660	6,674
(ref., s.t.)	12,935	40,284	19,833
Belgium*	16,210	16,222	
Denmark	401	97	718
France (crude)		974	813
(refined)	13,376	6,166	12,955
Italy	5,937		
Germany, West	31,768	31,603	
Netherlands	1,450	2,795	3,199
Norway	125		
Sweden	5,016	8,652	
Switzerland	3,286	2,892	1,538
U. K. (l.t.)	35,921	38,040	37,023
India (blister/-ref., l.t.)†	3,146	4,119	...
EXPORTS			
U. S. (ore and unref., s.t.)		6	...
(refined, s.t.)	16,605	8,965	4,404
Canada			
(refined, s.t.)	15,155	28,684	21,348
Belgium*	12,280	12,877	...
Finland‡	455	720	...
Germany, West	5,934	9,408	...
Norway	1,485		
Sweden	1,267	841	...
U. K. (l.t.)	7,284	10,359	5,787
Turkey*	508		
Belgian Congo**	24,733		
No. Rhodesia (blister & ref., l.t.)†	41,910	41,838	53,649

* Includes alloys.

** Copper wire bars and ingot bars 99% and copper ingots 97%.

† British Bureau of Non-Ferrous Metal Statistics.

‡ Includes old.

French Zinc Imports

(A.B.M.S.)

	(In metric tons)		
	Sept.	Oct.	Nov.
Ore (gross weight)	22,343	19,397	14,604
Belgium	13	494	...
Finland	2,000		1,700
Greece			1,576
Italy	5,934	5,029	2,080
Norway		508	1,066
Algeria	9,980	7,502	3,091
Morocco	2,179	5,864	2,981
Tunisia			2,110
Belgian Congo	2,196		...
Burma	41		...
Slabs, bars, blocks, etc.	710	728	496
Belgium	330	435	200
Germany (W.)		40	...
Italy	157	91	127
Norway		150	...
Algeria		12	6
Rhodesia & Nyasaland	223		163

French Metal Exports

(A.B.M.S.)

	(In metric tons)		
	Sept.	Oct.	Nov.
LEAD			
Ore (gr. wt.)	716	83	234
Pig lead	117	200	726
Germany (W.)			153
Sweden	12		
Switzerland	50	100	255
Other countries	55	100	11
Egypt			307
Antimonial lead	24	71	59
ZINC			
Slabs, bars, blocks, etc.	890	689	676
COPPER			
Crude copper for refining (blister, black and cement)	146	566	815
U. K. Copper Imports			
(British Bureau of Non-Ferrous Metal Statistics)			
(In tons of 2,240 lbs.)			
	1959		
(Gross Weight)			
Copper and copper alloys	38,040	37,023	33,957
U. S. Africa	200	250	1,050
Rhodesia-Nyasaland	19,566	20,157	18,893
Canada	7,636	6,326	5,100
Belgium	4	3	133
Germany (W.)	24	25	47
Norway	550	300	300
Sweden		2	...
United States	1,521	465	724
Chile	8,000	9,025	7,024
Peru		175	100
Belgian Congo	500	254	250
Other countries	39	41	336
Of which:			
Electrolytic	28,061	25,283	20,833
Other refined	4,476	3,550	3,925
Blister or wrought	5,400	7,696	8,541
Wrought and alloys		104	494
Total	38,040	37,023	33,957

Nonferrous Castings

MONTHLY SHIPMENTS, BY TYPE OF METAL
(Bureau of Census — Thousands of Pounds)

	Alu- minum	Copper	Magni- um	Zinc	Lead
1954 Total	607,764	834,557	25,572	474,741	18,396
1955 Total	833,058	1,011,748	27,892	781,254	21,045
1956 Total	801,136	966,473	36,168	88,069	20,734
1957 Total	751,856	875,389	30,322	663,330	23,791
1958					
April	44,948	59,311	2,215	35,796	1,487
May	44,093	57,506	2,422	36,447	1,655
June	40,701	57,124	2,205	38,132	1,971
July	38,818	51,124	2,200	32,765	1,394
August	45,034	57,790	1,869	35,860	1,804
September	52,796	64,447	2,804	47,127	1,725
October	55,699	74,012	2,627	45,045	1,708
November	55,793	62,476	2,615	48,431	1,409
December	59,487	67,905	2,612	55,600	1,497
Total	596,816	739,915	27,228	508,297	18,920
1959					
January	62,927	66,874	2,151	53,347	1,571
February	62,486	69,589	2,162	48,779	1,285
March	73,351	78,641	2,129	57,600	1,765
April	72,976	82,799	2,455	57,325	1,862
May	68,268	78,413	2,370	60,656	2,025
June	66,471	79,730	2,484	56,128	2,007
July	56,911	67,073	2,265	46,756	1,858
August	55,904	68,979	2,243	46,566	1,898
September	66,193	76,045	2,263	58,144	2,218

Copper Castings Shipments

BY TYPE OF CASTING
(Bureau of Census) (Thousands of Pounds)

	Total	Sand	Mold	Die	All
1952 Total	1,009,910	910,862	63,865	8,259	26,924
1953 Total	990,496	888,369	61,316	10,077	30,734
1954 Total	834,557	751,804	48,849	6,480	27,394
1955 Total	1,011,748	907,852	63,041	8,541	31,408
1956 Total	966,113	866,404	57,522	10,023	32,134
1957 Total	875,389	789,819	44,746	10,776	30,048
1958					
February	58,356	52,579	3,202	796	1,779
March	60,157	54,007	3,395	823	1,932
April	59,311	53,271	3,385	949	1,705
May	57,506	51,634	3,077	891	1,904
June	57,124	51,967	3,001	839	1,317
July	51,124	46,836	2,351	792	1,345
August	57,590	52,981	2,425	682	1,702
September	64,447	58,435	2,888	876	2,248
October	74,012	67,564	3,239	790	2,419
November	62,746	57,386	2,604	810	1,946
December	67,905	61,119	3,535	1,059	2,192
Total	739,985	667,255	36,529	10,201	22,681
1959					
January	66,874	59,856	3,572	1,216	2,230
February	66,589	62,593	3,557	1,176	2,263
March	78,641	69,472	4,333	1,361	3,475
April	82,799	73,567	4,640	1,328	3,264
May	78,413	69,351	4,363	1,291	3,408
June	79,730	70,836	4,421	1,175	3,298
July	69,073	61,650	3,869	946	2,608
August	68,979	60,346	4,410	993	3,230
September	76,045	66,517	4,810	1,138	3,580

Nickel Averages

Electro, cathode sheets, 99.00%,
f.o.b. refinery, duty included
(Cents per pound)

	1956	1957	1958	1959
Jan.	64.50	74.00	74.00	74.00
Feb.	64.50	74.00	74.00	74.00
Mar.	64.50	74.00	74.00	74.00
Apr.	64.50	74.00	74.00	74.00
May	64.50	74.00	74.00	74.00
June	64.50	74.00	74.00	74.00
July	64.50	74.00	74.00	74.00
Aug.	64.50	74.00	74.00	74.00
Sept.	64.50	74.00	74.00	74.00
Oct.	64.50	74.00	74.00	74.00
Nov.	64.50	74.00	74.00	74.00
Dec.	72.48	74.00	74.00	74.00
Aver.	65.165	74.00	74.00	74.00

Platinum Averages

N. Y. MONTHLY QUOTATIONS
(Dollars per Troy Ounce)

	1956	1957	1958	1959
Jan.	106.30	101.92	77.85	52.57
Feb.	104.34	98.59	74.82	59.25
Mar.	104.23	93.50	72.096	77.10
Apr.	103.92	93.45	70.72	77.18
May	105.23	92.865	67.34	77.50
June	106.50	92.02	66.18	77.50
July	106.50	90.265	64.35	78.00
Aug.	105.76	84.426	60.94	78.00
Sept.	105.50	84.00	59.50	78.00
Oct.	104.85	84.00	57.327	78.00
Nov.	104.50	83.80	56.41	78.44
Dec.	104.50	78.70	53.154	78.50
Aver.	105.18	89.79	65.07	74.17

Spot Straits Tin

(Straits, Open Market, N. Y.)

Monthly Average Prices

	1956	1957	1958	1959
Jan.	105.036	101.511	92.94	99.411
Feb.	100.803	101.132	93.915	102.785
Mar.	100.786	99.643	94.452	103.042
Apr.	92.268	99.304	92.988	102.505
May	96.994	93.347	94.512	103.125
June	94.589	98.05	94.708	104.25
July	96.143	96.52	94.892	102.337
Aug.	99.049	94.261	94.988	102.333
Sept.	103.809	93.406	94.101	102.44
Oct.	106.023	91.838	96.523	102.238
Nov.	110.921	89.236	99.118	101.021
Dec.	104.268	92.35	98.989	99.176
Aver.	101.475	96.301	95.177	102.055

Prompt Tin Prices

(Straits, Open Market, N. Y.)

Monthly Average Prices

	1956	1957	1958	1959
Jan.	104.768	101.347	92.653	99.351
Feb.	100.586	100.257	93.763	102.708
Mar.	100.524	99.476	94.363	103.042
Apr.	99.145	99.286	92.988	102.505
May	96.853	98.335	94.512	103.107
June	94.488	98.025	94.619	104.142
July	96.131	96.44	94.892	102.337
Aug.	98.924	94.159	94.976	102.345
Sept.	103.559	93.313	94.054	102.435
Oct.	105.716	91.848	96.455	102.238
Nov.	110.329	89.236	98.985	100.972
Dec.	104.00	92.34	98.96	99.176
Aver.	101.252	93.672	95.069	102.03

Quicksilver Averages

N. Y. Monthly Averages

	1956	1957	1958	1959
Jan.	277.80	256.00	224.35	219.50
Feb.	270.29	256.00	229.39	219.50
Mar.	261.40	256.00	232.096	223.57
Apr.	267.22	256.00	233.06	239.52
May	267.675	256.00	229.48	245.86
June	260.69	256.00	229.00	241.64
July	256.06	256.00	230.25	236.74
Aug.	256.00	252.20	240.27	232.524
Sept.	256.00	248.58	241.12	225.429
Oct.	255.92	234.48	235.94	224.548
Nov.	255.13	228.33	230.05	217.944
Dec.	256.00	226.50	223.54	215.05
Aver.	261.71	248.51	230.96	228.49

METALS, JANUARY, 1960

Primary Aluminum Output, Shipments and Stocks

	(U. S. Department of Interior)				
	Stocks beginning of month short tons	Production short tons	Short tons	Sold or Used Value f. o. b. plant	Stocks end of month short tons
1957 Total	1,647,714	1,579,035			
1958					
August	152,554	125,416	132,765	64,611,494	145,205
September	145,205	124,714	146,870	71,641,275	125,049
October	124,274	139,836	139,908	68,881,146	124,202
November	124,202	140,962	126,619	62,133,129	138,545
December	138,545	152,201	145,125	70,946,494	145,721
Total	1,565,556	1,595,067			
1959					
January	146,086	156,700	127,678	\$62,375,824	175,108
February	175,108	142,116	133,397	65,668,578	183,827
March	183,827	157,189	181,839	82,304,609	159,177
April	159,177	155,213	182,930	90,070,280	131,460
May	131,460	163,857	182,607	89,672,327	112,710
June	112,710	167,323	191,421	93,955,552	88,612
July	88,612	179,194	187,387	91,635,864	80,419
August	80,419	172,816	159,206	77,711,678	94,029
September	94,029	168,206	153,170	74,809,052	109,065
October	109,065	173,742	151,683	73,293,070	131,124

Virgin Aluminum

Ingot (30 lb.) 99 1/2% Plus, Delivered				
Monthly Average Prices				
(Cents per pound)				
1956	1957	1958	1959	
Jan.	24.40	27.10	28.10	26.80
Feb.	24.40	27.10	28.10	26.80
Mar.	24.60	27.10	28.10	26.80
Apr.	25.90	27.10	26.10	26.80
May	25.90	27.10	26.10	26.80
June	25.90	27.10	26.10	26.80
July	25.90	27.10	26.10	26.80
Aug.	26.70	28.10	26.77	26.80
Sept.	27.10	28.10	26.80	26.80
Oct.	27.10	28.10	26.80	26.80
Nov.	27.10	28.10	26.80	26.80
Dec.	27.10	28.10	26.80	27.361
Aver.	26.008	27.517	26.889	26.847

Aluminum Wrought Products

PRODUCERS' MONTHLY NET SHIPMENTS (Bureau of Census — Thousands of Pounds)

	Total	Sheet, Plate, Foil, Rod & Bar	Wire & Cable	Extruded Shapes	Powder & Paste
1955 Total	2,805,500	1,542,368	365,391	812,311	35,854
1956 Total	2,870,101	1,577,601	398,602	782,398	28,017
1957 Total	2,877,423	1,396,502	399,040	789,430	28,187
1958					
May	217,299	115,660	27,361	67,376	2,389
June	228,587	118,767	28,674	74,580	2,248
July	229,654	126,180	24,878	72,194	2,642
August	213,548	115,376	23,581	67,953	3,154
September	231,168	125,937	23,287	75,269	2,665
October	254,023	128,967	24,442	85,038	2,163
November	216,249	121,190	17,771	71,666	1,723
December	235,377	130,474	26,253	72,979	1,806
Total	2,624,911	1,441,385	285,355	821,249	25,742
1959					
January	235,463	132,361	26,480	70,309	2,246
February	230,733	131,564	21,740	71,364	2,028
March	271,642	161,285	21,940	81,276	2,578
April	293,554	166,942	25,468	93,475	3,178
May	320,786	184,664	28,532	99,308	3,641
June	341,389	195,476	30,156	107,038	3,901
July	373,060	211,850	39,902	111,661	4,708
August	247,833	126,512	29,411	85,380	2,537
September	262,749	140,313	25,843	89,986	2,419
October	286,841	154,856	27,614	97,071	2,697

Magnesium Wrought Products Shipments

(Bureau of Census)

	1956	1957	1958	1959
Jan.	2,188	2,130	1,271	1,271
Feb.	1,901	2,522	1,280	1,691
Mar.	1,946	2,388	1,398	1,717
Apr.	2,279	2,511	1,479	2,089
May	2,462	2,230	1,443	1,644
June	2,302	1,881	1,709	1,946
July	2,002	1,428	1,227	1,681
Aug.	2,523	1,540	1,823	1,823
Sept.	2,031	1,501	1,807	1,807
Oct.	861	1,453	1,983	...
Nov.	2,141	1,230	1,662	...
Dec.	2,452	1,102	1,622	...
Total	24,975	21,915	18,702	...

Aluminum Castings Shipments

	(Bureau of Census)				
	BY TYPE OF CASTING				
(Thousands of Pounds)	Total	Sand	Permanent Mold	Die	All Other
1954 Total	609,066	155,738	213,968	232,726	6,800
1955 Total	833,058	171,767	298,115	354,804	8,282
1956 Total	801,036	171,763	245,421	376,108	7,736
1957 Total	751,656	144,121	232,326	369,086	...
1958					
June	40,701	8,644	13,679	18,292	...
July	38,818	8,658	12,342	17,714	...
August	45,034	9,034	14,426	21,505	...
September	52,796	10,261	16,241	26,254	...
October	55,699	10,932	17,189	27,511	...
November	55,793	10,539	16,942	28,264	...
December	59,487	10,874	18,970	29,579	...
Total	596,790	117,421	186,949	292,599	...
1959					
January	62,927	10,907	20,606	21,349	...
February	62,846	10,627	21,127	31,021	...
March	73,351	12,412	26,964	33,949	...
April	72,976	12,700	26,153	33,992	...
May	68,268	11,979	25,283	30,877	...
June	66,471	12,306	24,927	29,092	...
July	56,911	11,581	20,410	24,786	...
August	55,904	11,130	17,824	26,818	...
September	66,193	12,309	21,506	32,239	...

Cadmium Averages

N. Y. Monthly Averages

	1956	1957	1958	1959
Jan.	170.00	170.00	155.00	145.00
Feb.	170.00	170.00	155.00	145.00
Mar.	170.00	170.00	155.00	145.00
Apr.	170.00	170.00	155.00	120.00
May	170.00	170.00	155.00	120.00
June	170.00	170.00	155.00	120.00
July	170.00	170.00	155.00	120.00
Aug.	170.00	170.00	155.00	120.00
Sept.	170.00	170.00	152.60	120.00
Oct.	170.00	170.00	145.00	*140.00
Nov.	170.00	170.00	145.00	140.00
Dec.	170.00	166.40	145.00	140.00
Aver.	170.00	169.70	152.30	132.00

* As of Oct. 1, 1959, for lots of up to one ton.

Steel Ingot Production

(American Iron and Steel Institute)

Period	Estimated Production — All Companies			Calculated weekly production		
	OPEN HEARTH	BESSEMER	ELECTRIC	TOTAL	% of capacity	capacity (net tons)
1954 Total	80,327,494	73.6	2,548,104	53.2	5,436,054	52.0
1955 Total	102,840,685	91.6	3,227,997	67.4	9,147,567	81.2
1956 Total	101,657,776	87.0	2,475,138	54.9	8,582,082	71.3
1957 Total	75,888,394	62.0	1,396,348	34.7	7,972,623	55.4
1958						
June	8,378,942	63.4	88,125	26.6	660,413	55.8
July	5,712,587	56.0	114,218	33.4	593,609	48.6
August	6,481,816	62.4	134,189	39.3	670,383	54.8
September	6,769,660	67.3	103,344	31.2	735,781	52.3
October	7,795,641	75.0	148,458	43.4	873,779	71.5
November	7,872,556	75.8	145,867	44.1	850,896	71.9
December	7,764,000	74.7	117,000	34.2	832,000	68.1
Total	75,888,394	62.0	1,396,348	34.7	7,972,623	55.4
1959						
January	8,280,985	77.1	120,005	39.5	729,675	63.7
February	8,540,000	88.0	129,000	47.0	757,000	73.1
March	10,216,474	95.1	184,892	60.9	929,784	81.1
April	9,884,332	95.4	196,000	66.2	946,850	87.0
May	10,117,968	94.2	200,887	66.1	1,024,401	89.4
June	9,521,058	91.6	185,794	63.2	941,056	84.8
July	4,400,182	42.2	66,433	21.9	526,025	45.9
August	1,171,412	10.9	—	—	267,935	23.4
September	1,249,398	12.0	—	—	285,619	25.8
October	1,385,490	12.9	—	—	319,043	27.8
November	6,290,659	60.5	92,361	31.4	754,793	68.0
December	10,461,000	97.3	206,000	67.8	1,032,000	90.0
Total	75,888,394	62.0	1,396,348	34.7	7,972,623	55.4

Steel Ingot Operations

(Percentage of Capacity as Reported by

American Iron & Steel Institute)

Week	Beginning	1957	1958	1959	1960
Jan. 4	98.4	56.1	76.2	...	...
Jan. 11	96.4	57.0	73.6	...	...
Jan. 18	96.6	55.5	74.6	...	...
Jan. 25	97.6	54.0	72.6	...	...
Feb. 1	97.1	54.0	76.9	...	...
Feb. 8	97.7	53.5	83.8	...	...
Feb. 15	97.8	50.9	83.7	...	...
Feb. 22	96.0	54.6	88.5	...	...
Feb. 29	97.1	53.1	90.3	...	...
Mar. 7	93.8	52.4	92.0	...	...
Mar. 14	93.5	52.5	92.9	...	...
Mar. 21	92.4	50.6	92.9	...	...
Mar. 28	90.6	48.6	93.2	...	...
Apr. 4	90.3	48.5	93.3	...	...
Apr. 11	90.4	46.8	93.8	...	...
Apr. 18	88.7	47.9	93.5	...	...
Apr. 25	87.0	47.8	94.2	...	...
May 2	86.7	49.4	92.0	...	...
May 9	84.2	52.3	92.9	...	...
May 16	86.4	56.4	93.4	...	...
May 23	88.0	58.1	93.6	...	...
May 30	87.5	62.5	93.7	...	...
June 6	86.5	84.0	92.0	...	...
June 13	85.2	64.9	92.5	...	...
June 20	84.0	61.7	87.8	...	...
June 27	78.5	51.0	78.2	...	...
July 4	78.7	53.4	79.5	...	...
July 11	79.3	54.9	88.7	...	...
July 18	79.4	57.3	12.9	...	...
July 25	79.4	57.8	12.2	...	...
Aug. 1	79.8	58.8	11.2	...	...
Aug. 8	80.6	60.5	11.8	...	...
Aug. 15	82.1	62.6	11.3	...	...
Aug. 22	82.2	63.5	11.7	...	...
Aug. 29	81.0	61.7	11.5	...	...
Sept. 5	81.9	65.9	11.6	...	...
Sept. 12	82.1	65.6	12.6	...	...
Sept. 19	82.2	67.3	12.8	...	...
Sept. 26	82.6	70.4	12.8	...	...
Oct. 3	82.8	71.6	12.8	...	...
Oct. 10	80.9	74.2	13.0	...	...
Oct. 17	80.2	74.8	13.1	...	...
Oct. 24	79.7	75.0	13.1	...	...
Oct. 31	78.0	74.5	13.0	...	...
Nov. 7	77.7	74.5	45.6	...	...
Nov. 14	76.0	74.1	78.9	...	...
Nov. 21	72.1	73.7	89.7	...	...
Nov. 28	71.5	73.5	93.6	...	...
Dec. 5	69.2	73.5	96.5	...	...
Dec. 12	67.7	74.5	96.3	...	...
Dec. 19	53.7	74.5	...	...	...
Dec. 26	59.0	73.6	...	...	...

Steel Castings Shipments

(Bureau of Census)

	(Short Tons)			For Own Use		
	Total	For Sale	Use	Total	For Sale	Use
1951	2,101,604	1,507,413	594,191	1951	1,295,116	1,476,352
1952	1,829,277	1,290,016	431,830	1952	1,184,096	880,158
1953	1,530,694	1,166,706	363,988	1953	1,350,964	688,256
1954	1,931,987	1,512,290	416,697	1954	1,207,787	912,234
1955	1,766,191	1,261,301	406,444	1955	1,45,926	111,080
Aug.	145,926	111,080	34,846	Aug.	139,002	105,611
Sept.	146,397	113,216	33,181	Sept.	103,297	79,708
Oct.	127,115	98,436	28,679	Oct.	106,233	82,195
Nov.	120,787	92,125	28,662	Nov.	95,389	73,367
Dec.	103,800	81,360	22,440	Dec.	87,002	66,086
Total	1,114,939	859,125	255,814	June	92,681	71,624
Jan.	120,722	94,717	26,005	July	68,802	48,818
Feb.	103,297	79,708	23,589	Aug.	80,886	59,816
Mar.	106,233	82,195	24,038	Sept.	85,277	64,586
April	91,464	69,121	22,343	Oct.	95,389	73,367
May	87,002	66,086	20,916	Nov.	85,267	65,788
June	87,298	63,55	21,237	Dec.	105,392	82,693
July	87,298	63,55	21,237	Feb.	110,280	86,013
Aug.	87,298	63,55	21,237	Mar.	131,317	103,848
Sept.	87,298	63,55	21,237	Apr.	134,344	104,890
Oct.	87,298	63,55	21,237	May	135,359	105,804
Nov.	87,298	63,55	21,237	June	143,624	111,725
Dec.	87,298	63,55	21,237	July	106,790	83,541
Total	1,114,939	859,125	255,814	Aug.	98,014	79,188
Jan.	105,392	82,693	22,709	Sept.	99,731	79,963
Feb.	110,280	86,013	24,267	Oct.	105,570	84,850
Mar.	131,317	103,848	27,469	Nov.	127,115	105,570
April	134,344	104,890	29,454	Dec.	105,570	84,850
May	135,359	105,804	29,555	Total	447,399	5,840,199
June	143,624	111,725	31,899	N.A.	—	—
July	106,790	83,541	23,249	N.A.	—	—
Aug.	98,014	79,188	18,826	N.A.	—	—
Sept.	99,731	79,963	19,768	N.A.	—	—
Oct.	105,570	84,850	20,720	N.A.	—	—

Galvanized Sheet Shipments

(American Iron & Steel Institute)

	(Net Tons)	1956	1957	1958	1959
Jan.	269,464	235,902	186,649	279,244	31,455
Feb.	272,997	205,048	167,627	281,637	29,451
Mar.	261,193	206,836	195,885	311,651	36,794
April	266,728	198,585	206,368	328,759	43,670
May	272,741	206,657	231,318	317,059	44,628
June	279,058	239,037	277,180	350,333	44,628
July	279,058	167,247	239,883	180,787	45,811
Aug.	276,048	186,790	253,263	N.A.	46,037
Sept.	256,803	183,952	255,723	N.A.	42,217
Oct.	278,637	212,888	290,157	N.A.	46,037
Nov.	255,135	190,380	253,909	196,644	60,261
Dec.	239,177	159,363	266,472	—	14,596
Total	2,957,991	2,392,837	2,288,848	—	16,842

* Combined with August figures.

N.A.—Not available.

Shipments of Tin-Terneplate

(American Iron & Steel Institute)

	(Net Tons)	1956	1957	1958	1959
Jan.	31,455	30,304	474,359	417,210	—
Feb.	29,451	24,602	397,861	442,625	—
Mar.	36,794	46,706	419,102	597,408	—
April	43,670	54,906	468,568	689,998	—
May	44,628	64,110	409,521	689,064	—
June	42,810	62,965	422,761	673,819	—
July	45,811	36,381	422,761	244,719	—
Aug.	46,037	N.A.	463,439	N.A.	—
Sept.	42,217	N.A.	525,739	N.A.	—
Oct.	60,261	N.A.	763,361	N.A.	—
Nov.	14,596	21,782	113,134	296,641	—
Dec.	16,842	—	150,942	—	—
Total	447,399	—	5,840,199	—	—

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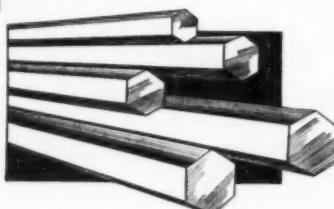
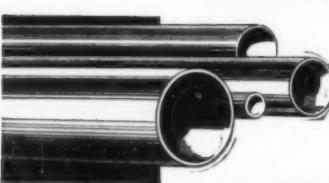
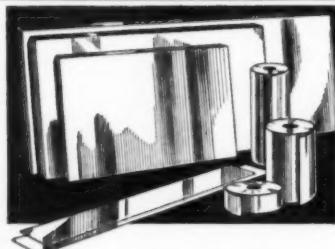


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